THE BUILDER

A Journal for the Architect & Constructor

APRIL 12, 1929 — No. 4497

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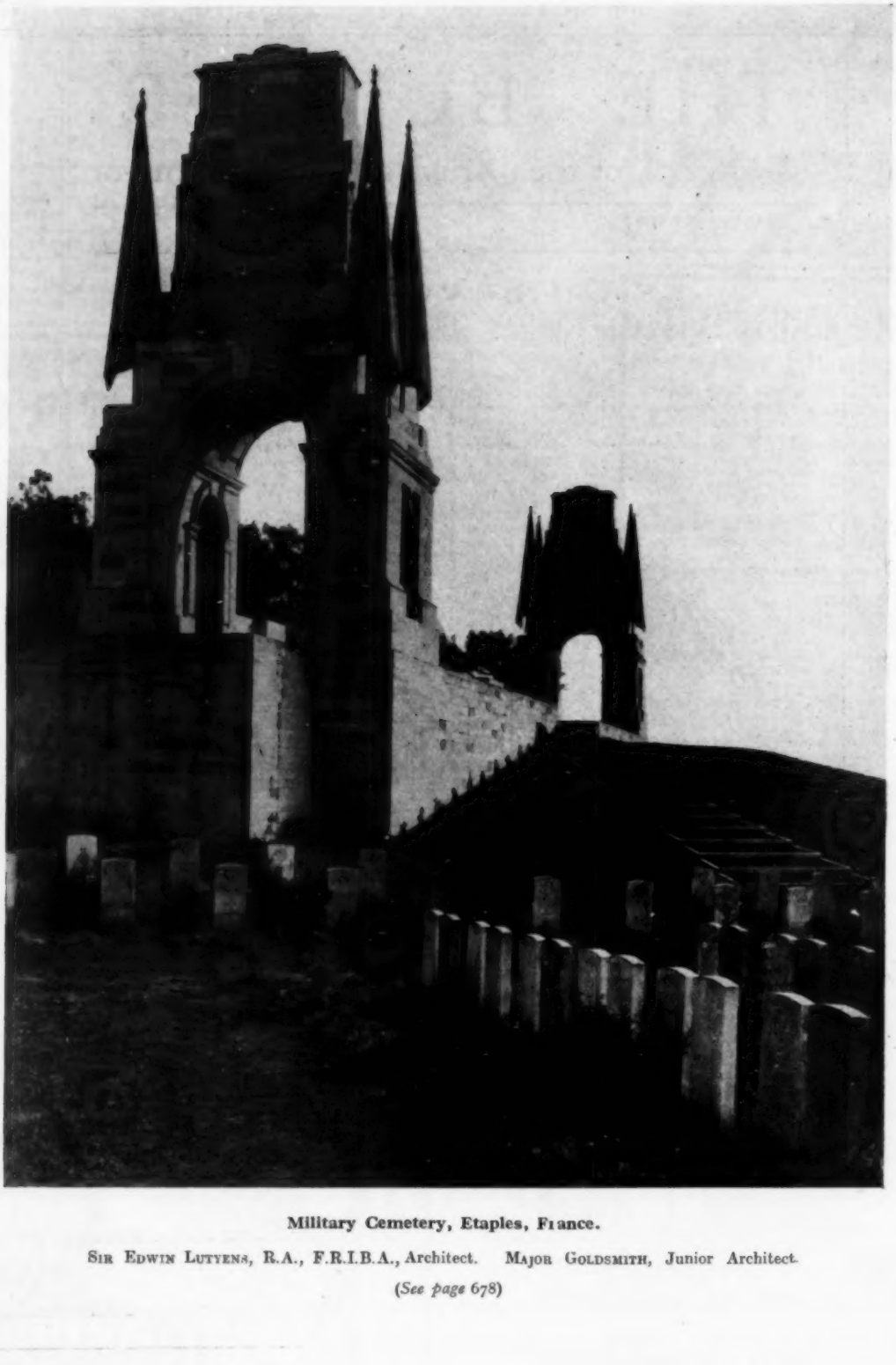
87TH YEAR



Military Cemetery, Etaples, France.

SIR EDWIN LUTYENS, R.A., F.R.I.B.A., Architect. MAJOR GOLDSMITH, Junior Architect.

(*See page 678*)

THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

VOL. CXXXVI. No. 4497. APRIL 12, 1929

"PORTLAND PLACE"

IT seems that the architects of the rising generation will have to acquire a new habit. "Conduit Street," as a name, has long stood as synonymous with the architectural centre of the Empire; but before long the name of "Portland Place" must be learned for a like purpose. So does an old tradition, like many another, give place to the irresistible pressure of an expanding organism.

It may be looking far ahead to think of the new building that will have to stand on the new site, but time passes quickly enough, and often too quickly for preparedness. What form is this new building to take? We venture to say that it presents the most difficult problem in all its aspects that the profession has had to face for many years. On planning we need anticipate no difficulties. This generation stands out in history as one skilful and inspired in planning, and there are a hundred architects who are capable of responding to such a call. But the selection of one from such a number is a problem in itself. A competition is irrevocable from the paper stage, and individual choice by any other means presents difficulties both political and artistic. A panel of executants calls to mind the unsatisfactory outcome of the Babel project. Experience irritates youth, and youth offends maturity. Confusion knocks at the door at every turn.

But even greater is the problem of right expression. How are we to express clearly the great things which the Royal Institute of British Architects should stand for? Presuming that we can find out exactly what it does stand for, how are we to say it in architectural language? It may be in some strange language of the future, or in the traditional terms of the past, or in some eternal expression that stands for both. We venture to say that that expression must be something that is alive; neither the last green panoply of a dying tree, nor the fresh glamour of a plucked flower doomed to die. Those who seek this expression must arrive at once at the consideration of what the Institute really is. They will, doubtless, seek a prototype, and in their quest discover that it resembles somewhat the Royal Academy, a body of artists; that it has much in common with the Royal Society, a body of learned men; that it contains something which the Medical Association contains, as the controlling force of a closed profession: and something, too, not unlike the workings of a Trade Union, watching the individual interests of numerous members. Yet, withal, it will be found that it is something utterly unlike all these, something quite unique, and without precedent or prototype. The discovery may be something of a relief, since to repeat a precedent in any way is apt to be an oppressive burden. The designer, therefore, arrives at a point where he realises that the thing he has to express is just the Institute, and not a type of any artistic body, or learned group, or professional club. What confusion of mind he may retain at this point arises more from the internal workings of the Institute.

If he were able to find that the Institute stands clearly either for tradition or modernism, his task would be easier. Even if he were called upon to find a compromise between the two the task might be simpler. But he cannot be sure of one thing or another, but only can he be sure of his own conviction, which may not relate at all to the general consensus of opinion, which surely should find expression in such a building and for such a purpose. It is unfortunate that we find ourselves on such an occasion standing somewhat doubtingly at cross roads, where the sign post is defaced and out of line. One would like to feel that when the Institute builds its new home, the future will be clearer and less a subject of dispute. We would like to know just where we are going, and to be able to say so in the language that is understood by the artists of all times; and we must confess to a feeling of helplessness on this occasion, arising not from a poverty of artists, but from a confusion of ideas which show no immediate likelihood of clearing.

This building must declare to the public a thorough soundness in art and science. It must express no passing phase of the moment, and neglect no sure indication of the future It must respect the sure foundations of the past upon which all that is best in the art of the day has been raised, and must ignore all that is lifeless and without meaning, which has clung to much work of pretension, like a parasite. It will be the work of a long head, an inspired vision, and skill of the highest. One feels that the young man might fill the part, but one feels, too, the need to have tasted much of life before the part could be well played. The old and tried might do it, but one feels an urgent need for boundless energy and optimism. Time and occasion will, doubtless, find the man, neither old nor young, neither too cautious nor too impulsive to fulfil the task in front of us. We should be sadly deficient in faith if we did not believe that such a man will be found in due course, and by means to which all will assent. If it were not so, the profession would, indeed, be in a bad way, and of course we refuse to believe that this is the case.

In one thing all will be agreed, and that is that the time is ripe for this adventurous move to new quarters. The past few years have seen the scope of the Institute widened to an unprecedented extent. There was the amalgamation with the Society of Architects, and now the new development proposals, swelling the membership manyfold from the time of the old Victorian "clubbish" datum. And to this also must be added the development of the Allied Societies, with their increasingly provincial influence upon the central body. This vigorous growth must be provided for in premises designed for a particular purpose, and Conduit Street could not for long contain such an organisation. The new building will, therefore, stand as a mark of the profession's confidence in itself. In performance, we must aim to make it demand the same confidence for the profession from the public, so that it may continue, unfettered, the good work it has begun.

May we suggest, at this point, that when the time comes, the club atmosphere may be a little more expressed than it is at present? Much good can be done by friendly and informal intercourse between men of the same calling, and there is no place more suitable for this sort of thing to take place than at the headquarters of their profession. We know of many who have expressed a feeling of oppression at Conduit Street, which is utterly inconsistent with the aims which the Institute stands for; and this would be a golden opportunity of setting things straight.

We have, then, some sort of an idea what the new building must express and stand for, and in this connection we would suggest one more thing. Modern architecture seems to have drifted away from an alliance with the sister arts of painting and sculpture, and to some extent from the co-operation of craft. We would like to see some attempt to embody the best sculpture of our times, and the best frescoes with the last word in good modern architecture, in which the skilled craftsman has had his measure of disciplined freedom. When we have found the man to do all this, he will have earned the right to stand head and shoulders above his fellows as having solved the most difficult problem with which architects of this and many previous generations have ever been faced.

NOTES

The Design for the Institute Premises.

A subject of very great interest and importance in the architectural world is the creation of a permanent home for the Royal Institute of British Architects. At last, after much serious consideration, the Institute has decided to purchase a site in Portland Place, and we refer to the proposals in our leading article this week and give further details on p. 690. In commenting on the proposal, a correspondent writes:—"A vital matter will be the designing of a suitable building for the Institute. The whole profession will feel that every effort should be made to secure a design worthy of its purpose and that the best means will be adopted to secure this. Probably the general feeling will be that every inducement should be offered to engage the ambition of the best designers in our midst to provide a worthy solution of the problem and most satisfactorily through the medium of a public open competition. It would be desirable that it should be limited to British citizens and that it should be divided into two events, the first being very much of the nature of sketch design, and the second a limited competition confined to some dozen of the best designers in the first competition, with a generous fee to each of the final competitors. Looking over the past history of competition efforts we should feel that the more youthful designers should be given their chance, though the actual carrying out of the work should be controlled by someone of sober and practical experience. I do not consider any living architect has yet had an opportunity to combine a power of outstanding individuality and freshness of thought with practical experience such as would ensure the erection of a building worthy of the purpose." It is obvious that this is an occasion when very keen criticism will be directed towards any design which is to represent the headquarters of the architectural profession; and dignity of effect combined with refinement of detail will be looked for by all those who are judges of art.

Garage Design.

One of the new problems facing the architect to-day is that of providing the large garage in an economically sound way. The large garage to hold hundreds of cars has come to stay, for the present parking of cars all over the town in squares like Lincoln's Inn-fields and St. James's-square, and in front of mews, etc., is impossible to contemplate as a permanency. One design we know of revealed the fact that the car could not be housed under a rental of less than five shillings a day to make a proper return on capital. But if the fair average cost of a garage on a favourable site is supposed to be some £150 per car it is probable the cost would be at least £200 in the city. How can a site be found and such an outlay be justified? An expert tells us that the ramp is not so good a solution of the problem as the elevator. But we imagine the best solution is hardly yet realised.

The Garage Competition.

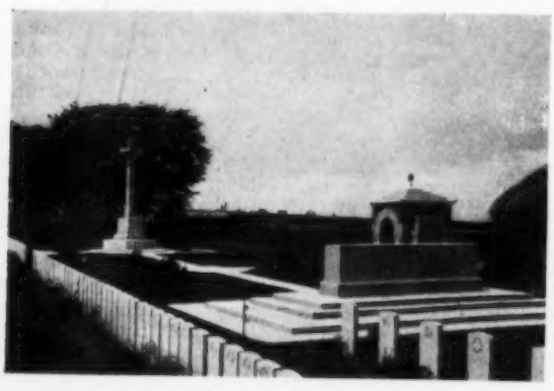
The garage designs at the Institute present quite a novel subject for the critic. Whether the system of ramps or elevators be adopted after expert opinion has had its say, when large garages of this kind become an accomplished fact, we must for the present be somewhat doubtful of. In no one of those exhibited can we have any special commendation for the exterior treatment, except in one design to the right of the winning design. It would be difficult to pretend to a critical judgment on the design such as was possible to the assessors, but the competition has been an interesting and useful one.

The Education of the Young Surveyor.

The paper on the 'Education of the Young Surveyor' given by Mr. B. W. Adkin at the Surveyors' Institution on Monday last, an abstract of which we give on p. 695, proved to be of great interest to members of the profession both young and old alike. That it was especially so to the younger members was shown by the eagerness with which those of them present sought to express their views or ask questions during the discussion. Older members there present remember the days when the syllabus of the examination stretched to a wider horizon for all branches of the profession; for instance, a building candidate had to show his knowledge of practical measuring before examiners. In these days of specialisation the examination is conducted under sub-divisions which permit of a student concentrating on the particular subjects of his branch of the profession, and avoiding having to specially study other and less familiar subjects just for examination purposes. The general value of specialisation before mature age, or the developed bent of the individual, is still problematic. It is true, in recent years, candidates have been admitted for examination at an earlier age, and have had to choose a typical subject in which they must show a high standard of knowledge; and the standard required of practical experience excludes the amateur and those who used to arise slowly, although by poverty depressed.

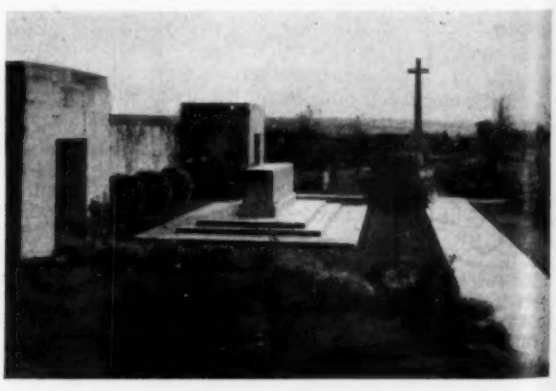
The Law of Contracts.

Much of the discussion bore on the comparison of the mentality of the candidates of earlier days and that of those of to-day; and the younger members being in the forefront amongst the speakers, the arguments went to laud the modern. Be that as it may, there are those who have watched the progress of these examinations—and the results—with satisfaction. If the Institution is to gather and benefit from the discussion, it will carefully overhaul the syllabus with a view to further useful revision. For instance, many legal subjects are included in the syllabus, but the basic legal subject to all of these, the law of contracts, is curiously excluded. We draw attention to what is surely an oversight. We have continuously seen the necessity of architects and surveyors being conversant with the law of contracts, and in our columns we have endeavoured to meet the need of the practising architect and surveyor by publishing week by week articles dealing with building contracts and the like.



Communal Cemetery Extension, Barlin.

Sir Edwin Lutyens, R.A., F.R.I.B.A., Architect.
Mr. Trehlove, Junior Architect.



Communal Cemetery Extension, Corbie.

Sir Edwin Lutyens, R.A., F.R.I.B.A., Architect.
Mr. Charles Holden, F.R.I.B.A., Junior Architect.

Communal Cemetery Extension, Daours.

Sir Edwin Lutyens, R.A., F.R.I.B.A., Architect. Major Goldsmith, Junior Architect.

The Architect and the Public.

In his lecture on "The Work of the Imperial War Graves Commission" at the R.I.B.A., on Monday last (a report of which is given on page 678), Major-General Sir Fabian Ware, in his sympathetic account of the work which has been done, laid special emphasis upon the means adopted to secure success. One cause, to which he attached the greatest importance, he described as "protecting the architects from harassing criticism and the usual form of public irritation." "I wish," he said, "that I had the time to develop this thought in a lecture to itself, because I believe that it goes to the root of the architect's public usefulness. As some of you have been kind enough to notice, I am connected with a national voluntary movement, in which, again, we depend entirely on our architects. I refer to what has come to be called Rural Preservation. It is no exaggeration to say that in this connection the fate of England is in the hands of her architects. They will only partially succeed unless there be secured to them the power to give expression to their ideas and inspirations. I am profoundly convinced that the system which the Commission adopted indicates ways in which this can be achieved."

The Artistic Temperament.

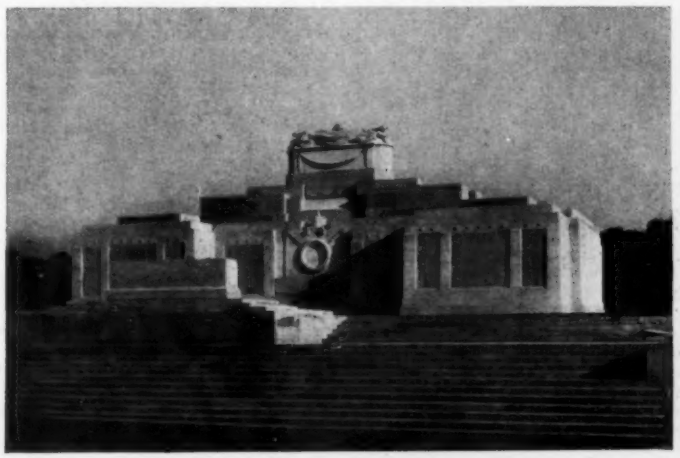
"I am not going to try to formulate," he continued, "a correct definition of what is called, generally apologetically, 'the artistic temperament.' But to ignore it, or to be impatient with it, or to patronise it from a standpoint of practical superiority, are all sure ways of reducing the artist to a state of impotence. And why should we? All said and done, it is something closely akin to the spiritual aspirations of all men and women, springing from the same source planted in all of us, that we ought to be able to understand it. Is there one of us whose soul does not sometimes burst through its material surroundings and take solitary flight in regions of thought beyond rational limitations or human conventions. . . ? We have no right to use the artist or call upon him to give expression to our ideas unless we are prepared, as far as in us lies, to ensure for him the conditions which every one of us who is not a mere materialist knows to be those alone favourable to such spiritual achievement And, if we are so privileged as to be placed in a position where we have the power to do so, we should shield and protect him from adverse influences, and, above all, make it clear to him, beyond suspicion or doubt, that we trust him."

The Layman and the Architect.

A further remark of Sir Fabian is of special interest to architects, in view of the movement for the preservation of the amenities of town and country. The experiment which they had carried out in connection with the work of the Imperial War Graves Commission, he said, suggested ways by which the architect could be given greater freedom and a more congenial atmosphere in which to give expression to the best that was in him. "It has at any rate convinced me," he concluded, "that architects are much more likely to get their own way—and they must get it if England is to be saved—in the work of rural preservation and town planning, if on the public advisory panels there are enough sympathetic laymen to undertake all the negotiations with the public so that the architects have not themselves to oppose error and suppress abuses."

Damage from Power Stations.

A very strong protest against the proposals for power stations in London by the Central Electricity Board ought to find instant and sympathetic consideration by the Government. In view of the serious objections to the proposals it seems to us they can hardly be justified. The likelihood for very real damage from the consumption of some 2,000 tons of coal daily at the proposed station at Battersea is only too probable. We sincerely hope this influential appeal will be treated with the attention it claims. The appeal includes the names of Messrs. Tapper and Guy Dawber and Lord Dawson of Penn.



Memorial in Military Cemetery, La Ferte sous Jouarre, Belgium.

Major Goldsmith, Architect.

GENERAL NEWS

Professional Announcements.

Messrs. C. E. Ball & Partners, chartered quantity surveyors, have removed from 7, King's Bench-walk, Inner Temple, E.C.4, to Dilke House, Malet-street, W.C.1. Telephone: Museum 0959.

Mr. Owen P. D. Williams, architect and surveyor, has removed to "Chequers," Elmsleigh-drive, Leigh-on-Sea, and will be pleased to receive the latest trade catalogues and samples.

Mr. Stanley Waghorn, A.R.I.B.A., has removed his office to 22, Essex-street, Strand, W.C. Telephone: Central 6912.

R.I.B.A. Annual Dinner, 1929.

The annual dinner of the R.I.B.A. will take place on Tuesday, May 14, in the Merchant Taylors' Hall, which has been kindly lent for the purpose by the Court of the Merchant Taylors' Company.

Christ's Hospital.

H.R.H. Princess Mary, Viscountess Lascelles, who is a governor of Christ's Hospital, has consented to pay a visit to the Girls' School at Hertford on Monday, May 13, to open the new Science Building which has been erected by the Governors, and designed by the Surveyor to the Hospital, Mr. Sydney Tatchell, F.R.I.B.A.

Bolton Infirmary: Commencement of Extension Work.

The Infirmary Committee has decided to proceed at once with a portion of an extension scheme, to cost £177,000, towards which £77,000 has already been subscribed. The architects are Messrs. Bradshaw Gass & Hope, FF.R.I.B.A., 19, Silverwell-street, Bolton.

Royal Society of British Sculptors.

At the annual general meeting of this Society just held, Mr. W. Reynolds-Stephens was elected president for his ninth term of office. Mr. Gilbert Bayes was elected vice-president and Mr. C. L. Hartwell, R.A., treasurer. Mr. Cecil Thomas was elected an Associate.

The Amenities of "Lord's."

We learn that the M.C.C., to preserve the amenities of Lord's cricket ground, have bought a large block of property adjoining the north-west corner of the ground behind the pavilion. Four houses in Grove End-road, and one in Elm Tree-road, forming a large square block with an area of 70,000 sq. ft., are included in the purchase.

Competition of Industrial Designs, 1929.

By permission of the Board of Governors of the Imperial Institute, the public exhibition of works sent in for this year's Royal Society of Arts open competition of industrial designs will be held in the Exhibition Pavilion of the Imperial Institute, South Kensington, S.W. Full particulars of the scholarships and prizes offered in connection with the competition can be obtained from the secretary of the Royal Society of Arts, Adelphi, W.C.2, to whom applications for forms of entry, labels and instructions must be sent between May 1 and May 11. The last day for receiving entries is May 27.

Lambeth Bridge.

We learn that Lambeth Bridge will probably be closed for demolition about the middle of next month. The closing will take place when the new temporary bridge, on which work is now in progress, is completed. Nests of piles have been driven into the river bed, and it is expected that the temporary structure will be ready for foot traffic in about a month's time. Plans for the new £550,000 Lambeth Bridge, designed by Sir G. Humphreys, have been recently agreed to by the London County Council.

An American Gift to Stonehenge Fund.

The Pilgrims of the United States have sent to Mr. Wilson Taylor, the honorary secretary of the Pilgrims of Great Britain, a contribution of 100 guineas from the American Pilgrims towards the appeal for funds by the National Trust in aid of the preservation of Stonehenge.

The late Herr Bruno Moehring.

The death is announced from Berlin of Bruno Moehring, the distinguished Berlin architect, who won the Paris Gold Medal in 1900. Professor Moehring, who was aged 66, won the first prize against 265 competitors for the design of the new German Embassy in Washington in 1913. A sensation was caused in Germany when the ex-Kaiser, in spite of the prize awarded to Professor Moehring, ruled him out, and gave the contract for the new German Embassy building to a Court favourite. Profesor Moehring was well known as the designer of bridges and office buildings in Germany. He won a number of other prizes, including the St. Louis Grand Prix in 1904, and Milan in 1906.

Swakeleys: London Survey Committee's Monograph.

With reference to the purchase of Swakeleys, Ickenham, Middlesex, by the Foreign Office as a Sports Club, the London Survey Committee announce that they propose to make this house the subject of their 13th Monograph. The volume (which will be in quarto) will be published in the course of the summer, and in addition to giving a full historical and architectural description of the house, will be illustrated by photographs, sketches, reproductions of old prints, and a complete set of measured drawings of the house as it is at the present day. The Secretary, Mr. Percy Lovell, F.S.A., will be glad to send particulars later on of the price, etc., to those who may be interested in the publication.

The Tower of London: Summer Course of Lectures.

Mr. Allen S. Walker, Extension Lecturer to the University of London, will give a summer course of lectures on the history of the Tower of London, in the Martin Tower at the Tower of London, on Tuesdays, at 11 a.m. The lectures will be given weekly from April 23 until August 6. They will be illustrated by lantern slides. The admission fee to each lecture is 1s., which will include a visit to one of the towers to which special reference has been made in the lecture. Tickets may be obtained on the day of the lecture at the Tower of London, or by prior application to H.M. Office of Works, Storey's-gate, Westminster, S.W.1.

MEETINGS

SATURDAY, *April* 13.

Institution of Municipal and County Engineers. Joint Meeting of the Yorkshire and North-Western Districts. College of Technology, Sackville-street, Manchester. 2.30 p.m.

Association of Architects, Surveyors, and Technical Assistants. Visit to the Home Office Industrial Museum. 2.15 p.m.

Clerks of Works' and Builders' Foremen's Association. Annual Dinner, at the Holborn Restaurant. 5.30 p.m.

MONDAY, *April* 15.

Surveyors' Institution. Annual Dinner, Connaught Rooms, W.C.2. 7.30 p.m.

WEDNESDAY, *April* 17.

Royal Society of Arts. Mr. F. E. Lamplough on "The Properties and Applications of 'Vita' Glass." 8 p.m.

THURSDAY, *April* 18.

Institution of Structural Engineers. Mr. F. M. Du Plat Taylor on "Casing Piles Damaged by Marine Worms in Reinforced Concrete; and other Repairs at Swanage Pier." At Leeds. 6.45 p.m.

COMPETITION NEWS

National Sign for Petrol-Filling Stations and Garages.

One hundred and ten designs were submitted in this competition. The assessor's report is as follows:—

"We unanimously award the prize of £50 to the author of design No. 28 (Mr. R. L. Gould, of 577, Reddings-lane, Hall Green, Birmingham), and highly commend design No. 10 (Mr. H. Lewis Curtis, A.R.I.B.A., of 68, Strand-on-the-Green, Chiswick, W.) and design No. 103 (Mr. G. Stephenson, of the School of Architecture, University of Liverpool). In our opinion, Mr. Gould's design meets the conditions laid down more nearly than any other competitor's, though we suggest that certain modifications in detail are desirable. The design is adaptable to varying conditions and requirements, would be simple to make and fix and moderate in cost, thereby being suitable to every type of petrol-filling station and garage."

The report is signed by Messrs. Oswald P. Milne (Chairman), Edward Maufe, H. P. G. Maule, and Basil Oliver.

Mr. Oliver Hill was unable to be present when the award was made. The designs are now on exhibition at the galleries of the R.I.B.A., 9, Conduit-street, W.1, until Saturday, April 20, during the hours of 10 a.m. and 8 p.m. (Saturdays 10 a.m. to 5 p.m.).

Proposed Church Hall, Blackpool.

The Parishioners of St. Mary's Church, Highfield-road, propose building a parochial hall, at a cost of from £5,000 to £6,000. Local architects are to be invited to send in competing plans for the work.

R.I.B.A. Garage Competition.

The awards in this competition, the prize-money for which was presented by Mr. H. S Horne, are as follows:—

First (Premium £350): Mr. Thomas Spencer, A.R.I.B.A.

Second (Premium £70): Messrs. T. H. Newton and Oscar A. Bayne.

Third (Premium £50): Mr. Stanley Atkinson.

Fourth (Premium £20): Mr. E. G. Theakston, F.R.I.B.A.

The project was purely hypothetical, and no site was indicated. The drawings, which are now on exhibition at the R.I.B.A., remain the property of competitors. The assessors were: Messrs. W. J. Tapper, P.R.I.B.A., Robert Atkinson, F.R.I.B.A., T. P. Bennett, F.R.I.B.A., and W. Rootes and J. E. Forbes. The first and second premiated designs are illustrated in this issue.

Houses, Baildon (Yorks).

Messrs. J. H. Hall & Sons, Market-street, Huddersfield, are the successful architects in a local competition for the erection of 30 houses on the Town Gate Estate for the District Council.

Crowland Abbey; Progress of Restoration.

The work of lowering the floor of the ruined 12th-century nave of Crowland Abbey, Lincolnshire, which has been carried out during the last few months, is now completed, says the *Times*. Hundreds of tons of soil have been removed, to a depth of 2½ ft. to 3 ft., throughout the length of the nave (some 144 ft.), and the floor is now at its original level. A similar restoration to the north aisle of the Abbey was completed nearly three years ago. In this latest restoration the bases of the pillars have been uncovered, and the massive arches are seen now in their true proportions. The central pillar in the doorway of the main entrance was found to be decayed, and a pillar of Clipsham stone has been substituted. The work just completed has been carried out, under the direction of Mr. W. Bond, F.R.I.B.A., of Grantham, by Messrs. John Thompson and Sons, Ltd., of Peterborough.

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

Symbolism.

Sir,—Permit me to correct a very misleading statement made by Mr. Arnold Whittick in last week's *Builder*. He writes: "The crown in ancient days, it must be remembered, had no regal significance."

The most casual acquaintance with the history of ancient Egypt would correct this fallacious statement. The Stele of Next-Ames refers to Ra as "the saffron diademed, the LORD OF THE TWO CROWNS."

In Professor Lushington's "Records of the Past" is quoted a hymn relating how "Ra hath quelled his foes, . . . the diadem is in its place, the URÆUS has smitten the wicked."

Sir Wallace Budge says: "The Egyptian king, like the Jewish, was anointed and his DOUBLE CROWN was supposed to be given him by his favourite deities. In one scene Rameses II is being CROWNED by Set, above whose head is written: "I set up thy headdress on thy head like thy father Amen Ra."

Andrew Lang tells the story of how Meriamum won the Royal Uræus (symbol of sovereignty) from her dull-witted brother Meneptah, the Pharaoh of the Exodus.

Ita lex scripta est!

F. R. Bill, A.R.I.B.A.

Sir,—Mr. Arnold Whittick, in asking the source of my information in stating that the rose symbolises love, answers his own question in his following paragraph by saying that "the rose, from the earliest times, has symbolised the superlatively beautiful"; is not love superlatively beautiful? According to Euclid, things equal to the same thing are equal to one another.

Both my interpretations, of the rose and the crown as a symbol of self-control, are derived from reading Ruskin and trying to think reasonably and poetically.

C. F. Annesley Voysey.

"The Attitude of the Plasterer."

Sir,—Adverting to the paragraph headed "Attitude of the Plasterer," which appeared on page 630 of the issue of *The Builder* for April 5, your readers may be interested in the enclosed statement, which was sent to the Editor of the *Daily Telegraph* over a year ago in response to an article which appeared in its issue dated March 24, 1928, in which precisely the same comment regarding plasterers is contained. Copies were also sent to the *Daily Herald*, Press Association, Central News, and Exchange Telegraph.

Unhappily, the unemployment figures respecting plasterers show a further increase; the figures published in the *Ministry of Labour Gazette* for March are as follows:—

Number of plasterers	23,430
Number unemployed at February 25	7,695
Percentage	32.8

At the same time there is nothing to prevent anyone from following the trade of plastering if they choose to qualify by the time-honoured method of apprenticeship.

A. H. Telling,
General Secretary, National Association of Plasterers, Granolithic and Cement Workers.

[Copy.]

March 28, 1928.

"Individualism in the Modern World."
Work makes Work.

Dear Sir,—Sir Ernest Benn, in recent articles published in the Press, notably the *Daily Telegraph* of March 24, and the *Northern Chronicle* of March 24, made statements concerning the British plasterers which call for correction.

Sir Ernest says: "For example, the 17,420 gentlemen who monopolise the art of plastering are able to demand terms in money, though not in real value, which they might not secure in the open market."

Had Sir Ernest Benn taken the trouble to verify his "facts" at an official source, he would have discovered that instead of 17,420, according to the *Ministry of Labour Gazette* for January, 1928, the Ministry of Labour estimated that at July, 1927, there were 22,130 (twenty-two thousand, one hundred and thirty) insured persons registered as plasterers.

If Sir Ernest Benn had examined the *Ministry of Labour Gazette* for February, 1928, he would have found that the total number of plasterers unemployed on January 23 was 4,055 (four thousand and fifty-five), or 19.2 per cent. If he had troubled to look further into the question and compared the figures published by the Ministry for July, 1923, he would have found that, according to the *Ministry of Labour Gazette*, the number of "gentlemen who monopolise the art of plastering" had been increased by over 25 per cent. during the four years ending July, 1927.

A. H. Telling, General Secretary.

Is the Architect Sufficiently Technical?

Sir,—"Positive" forgets that there is a specification as well as drawings, and plumbing work is usually described in that, together with the run of the pipes, by the ordinary architect.

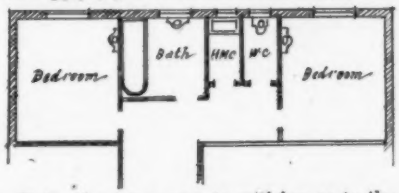
S. B. Russell.

RESPONSIBILITY FOR BURST PIPES

By J. R. TAYLOR.

With regard to this subject, most of your correspondents appear to ignore the primary factors and insist that the essence of the trouble is due to the absence of forethought on the part of architect, builder or plumber in selecting the correct runs for the supply and service pipes. This, from a practical point of view, is hardly correct, as there is a very great number of other considerations that enter into the matter, and, I might say, dictate the run of the pipes.

In the first place, it has to be borne in mind that all points where water is drawn off for use, convenience, sanitation and economy require that means shall be provided for discharging waste or slop or used water into the open air by the shortest and most direct route. For this reason, water-closets, bathrooms and sculleries, and all rooms having sinks or lavatory basins, have usually at least one outer wall. The architect or builder (whoever designs the house) will usually quite correctly place his bath, lavatory, sink or water-closet on this outer wall, and having placed them there, he must necessarily take his supply pipes to them. Take this plan:—



It is, of course, open to criticism as to the planning, but that is not quite the point. Here are a number of fittings conveniently and economically grouped where the natural and economical way to run the cold-water service leaves hardly any choice. It may be taken along and over the ceiling, or along and under the ceiling, or at about skirting level, and as hygiene calls for all five windows to be left open at night, it will almost inevitably freeze in severe weather unless very carefully protected by wrappings and/or casings. The alternative is to empty the pipes in severe weather. Cased or wrapped pipes create a difficulty as to locating a burst should it occur, and, even if carefully carried out, casings will harbour dirt and wrappings will both harbour dirt and be unsightly. Emptying the pipes calls for the educated co-operation of the householder. I wish to stress that the householder's co-operation must be educated, as it is here that the analogy of the motor-car does not hold good. The motorist is taught to empty his radiator, and warned by his own or his friends' experience of seized engines, but seldom forgets to fill it again. Further, he gives this emptying and refilling his own personal attention. He is also usually very keenly interested in the care and upkeep of his car, and is for ever studying all points of management, if not by means of text-books at least by never-ending discussion with his garage proprietor and with his friends and fellow-motorists.

Text-books on the care and upkeep of the motor have a wide circulation among motorists, but in a long experience I have never yet come across a householder unconnected with the business of building poring over a text-book on the care and upkeep of his house. But in spite of all this interest and study, motor-cars broken down from sheer careless neglect of elementary attention are far more frequent than burst pipes or choked drains. It must be confessed, however, that an opportunity equal to that enjoyed by the motor owner is not afforded to the house-owner. The car manufacturer, when he sells a car, invariably provides a booklet of instructions as to its care and upkeep, and how to obviate and correct minor troubles. I believe that both architects and builders would do well to copy this example, and that any builder doing so would find it a good selling point. Such a book need not be very elaborate, but might embrace short chapters on "What to do in Frost," "How to avoid Choked Drains," "How to plunge a Water-closet," "How to Unstop the Lavatory or Sink Waste Pipe," "Periodical Services and Sanitary Cleansing," and so on.

But to return to our subject. The best way to avoid bursts is to empty the pipes. Here I agree that any householder who has not got a readily accessible stop tap *inside* the house has a distinct grievance against the architect, builder or landlord. The water companies will for their own protection insist on a stop tap before the main enters the house, but this is usually operated by a key and is a mystery to the average householder. I am of opinion that a building by-law insisting on a readily controllable stop tap *inside* the house could not be regarded as harsh or uncalled for.

One of your correspondents pointed out that as a rule the kitchen boiler cannot be emptied because the tap over the scullery sink is at a greater height than the boiler. Let me assure him that, far from being necessary, it is not even desirable that he should be able to empty either the boiler or the hot-water circulating cylinder. All that is necessary is to empty the cold-water storage tank and as much of the general piping, hot and cold, as can be effected by turning on all draw-off taps. The boiler and cylinder can usually be left to take care of themselves without any fear of their freezing within 48 hours of the fire going out, and more often than not for even much longer periods. The only real advantage of a draw-off cock capable of emptying boiler and cylinder is that it may be desirable to do so if the house is entirely vacated for a time; but in this case the tap should be operated by a loose key, and *left open* until it is desired to refill boiler and cylinder. The refilling calls for assistance from the plumber if air lock and kindred troubles are to be avoided.

In the ordinary way, refilling the storage tank and pipes is a simple matter. All that is necessary is to turn on the stop-cock. *Do not, however, turn off any of the draw-off cocks until water is actually passing through them.* Turn off the *lowest* cock first, and then progressively to the highest.

If these methods are adopted, the only other points that require much in the way of protection by means of wrappings of hair-felt are pipes between ceiling and roof, pipes supplying outside or yard water-closets, and stand-pipes to hose for use in garden or garage.

THE WORK OF THE IMPERIAL WAR GRAVES COMMISSION.

At Monday evening's meeting of the R.I.B.A. (the President, Mr. Walter Tapper, A.R.A., in the chair), a paper on this subject was read by Major-General Sir Fabian Ware. The lecturer said that architects had been responsible for designing 930 separate cemeteries in France and Belgium, 18 in Italy, 11 in Macedonia, 31 in Gallipoli, 24 in Palestine, 6 in Mesopotamia, 15 in Egypt, 47 in East Africa, 322 in the United Kingdom, that was to say, more than 1,400 separate monuments, each demanding individual treatment. In addition to this, they had designed 14 large battle memorials on which were inscribed the names of the "Missing" in France and Belgium, the three memorials to the men of the Navy, who have no known grave, at Chatham, Portsmouth, and Plymouth, the memorial on Tower Hill to the men of the Merchant Navy killed by enemy action, as well as similar large memorials at Lake Doiran in Macedonia, at Cape Helles in Gallipoli, at Jerusalem, at Port Tewfik on the Suez Canal, at Basra in Mesopotamia, a laboratory in memory of the Egyptian Labour Corps and Camel Transport Corps in Cairo, and memorials to native troops in East Africa, some 27 memorials in all. Panels commemorating the million dead of the Empire had been placed in 23 cathedrals in different parts of the world.

One general remark he might safely make. The R.I.B.A. had earned the Empire's gratitude by the way its members had carried out that work; it had proved, what many of them knew already, but of which even some British people were ignorant, that our architects were second to none in the world; but what was hardly less gratifying was that they had for the first time on such a scale placed permanent evidence of this, in foreign lands, to whose people it had come as a revelation, commanding their respect and admiration; this was shown not only in their writings, as it often was, but also by the general expression of opinion which one heard constantly on all sides abroad.

Looking back over the past fourteen years, he was tempted to place first amongst the causes of this success the fact that the Commission and the military organisation which preceded them, always took time by the forelock. They realised that during the war only some form of benevolent autocracy could possibly control the situation which would arise when the war was over. They knew that they would then be dealing with hundreds of thousands of separate claims for individualistic treatment of the graves, claims based on such a depth of sentiment that their appeal would be irresistible if pressed, unsatisfied, before a public in which British hearts would dominate British brains. They realised fully that chaos must result unless they could lead all those stricken men and women to some common form of the expression which monuments and their architects could give to their pride and their grief. Having, for obvious reasons, prohibited the erection of permanent memorials in all the areas of fighting during the war, in 1917 they began to consider what form of permanent memorials should be adopted. They thus, before the war was over, entered on what might be called the architectural stage of their work. But they had not, up to then, been without the guidance of architects. Colonel A. A. Messer, who was his second-in-command throughout the war, was an architect, and the lay out of the cemeteries, as they were formed, were his special care; what a large part this played in their ultimate design would be grasped by any intelligent person who had seen, for instance, Etaples in its present finished form. Among the officers under him were other architects, of whom Major Charles Holden and Mr. Lionel Pearson were to-day the best known.

Having referred to the appointment of Sir Frederic Kenyon as chairman of a committee to settle some early differences of opinion on questions of principle among "one or two foremost architects," the lecturer said the governments which the Imperial War Graves Commission represented had already laid down the principle of equality of treatment for the graves of all ranks and the Commission, therefore, in its reference to Sir Frederic Kenyon, asked him in particular to endeavour to reconcile different proposals for giving effect to this policy. Generally speaking, Sir Frederic's independent inquiry entirely confirmed the opinions formed by those who had long been at the work, but out of the many admirable proposals in his report, that to which the architectural results attained were, in his opinion, pre-eminently due, was his suggestion as to the selection of architects:—

"I would rather go back to the mediæval tradition of a master architect or painter, surrounded by a school of disciples, who, under his guidance, and with greater or less degrees of subordination, did their work and learnt to be Masters in their turn.

"I would, therefore, recommend that the cemeteries be divided into a few large groups; that to each group should be assigned one principal architect and a number of younger men, working under his leadership; that the majority of the cemeteries should be designed by the younger men, but that their plans should be submitted to the principal architect and should receive his approval before being sanctioned by the Commission. The principal architect would, no doubt, reserve a few of the most important sites in his area for treatment by himself; for the others he would stand sponsor in the eyes of the public, but would endeavour to leave the main credit to his younger colleagues, while conferring freely with them and assisting them with his advice.

St. Sever Cemetery.
Sir Reginald Blomfield, R.A., F.R.I.B.A., Architect.
Mr. Cowlishaw, Junior Architect.

"In the selection of the younger architects, I would recommend that preference should be given to men who have served in the Army. Indeed, I do not think anyone should be accepted for the work who has not so served, unless he has been absolutely precluded from serving on medical grounds; and even then I consider that preference should be given to those who have served, if a sufficient number with adequate professional attainments are available."

There were, continued the lecturer, two sets of people who fought the war, the sailors and soldiers, and those who were forcibly detained at home. The former suffered and enjoyed themselves, the latter suffered only, and they too had a right (in many cases the first right) to decide how the graves should be treated. Proper expression would therefore not have been given to national feeling in any part of the Empire if only those architects who had served in the war had been employed.

When their organisation was once well-started, and they saw time ahead which justified open competition, a number of the designs for memorials were thus obtained. The principal architects appointed by the Commission were: Sir Reginald Blomfield, Sir Edwin Lutyens, Sir Herbert Baker and Major Charles Holden (France and Belgium), Sir John Burnet (Gallipoli and Palestine), Sir Robert Lorimer (Italy, Egypt, Macedonia, United Kingdom and Germany), and Major Edward Warren (Mesopotamia).

The lecturer also had with him a complete list of all the architects who had had a share in the work which, he said, was far too long to be read, but would be published in the *R.I.B.A. Journal*.

The second cause of success was three-

Indian Memorial, Neuve Chapelle.
Sir Herbert Baker, A.R.A., F.R.I.B.A., Architect. Captain Hutton, Junior Architect.

fold (*a*) what he might call the organisation of sympathy with the architects among their administrative staff, (*b*) the administrative underpinning of their work, and (*c*) deliberately protecting them from criticism and the usual forms of public irritation. All their departments—works, secretarial and finance, dealing with construction, had realised from the outset that during the stage of construction the architects were the men on whom the success or failure of all the Commission's efforts in the first place entirely depended, and that consequently they had to be supported by every means in their power. Colonel Robinson, their present Director of Works, said to him the other day: "The chief duty of my department has been to serve the architects" Nobody could know as he (the lecturer) did the sympathetic support that had quietly and persistently been given (often without the knowledge of the architects themselves) to carrying out their proposals.

He would ask them to believe that it was with the intention of ensuring the conditions which he had attempted to describe that the Commission devised a relationship with the architects they employed of, he believed, an entirely new kind. A very brief experience taught them that their administrative officers and he would be far too busy and harassed by their own duties to meet the architects, at any rate on all occasions, while they were developing their designs, in the spirit which was essential. He therefore recommended, and the Commission approved, that Sir Frederic Kenyon should act as their honorary architectural adviser, to be their mouthpiece with the architects, and to certify their designs as conforming to the policy of the Commission before they were submitted to that body. It thus fell upon Sir Frederic Kenyon, and to some extent the lecturer, as a Commissioner and Chief Executive Officer, to obtain the Commission's approval for each of the designs. The Commission had been an extremely active body, their members taking a keen interest in all details of the work with particularly lively appreciation of the desirability that perfect architectural expression should be given to the relatives' and the Empire's respect and grief. The designs submitted to them had therefore often been the subject of careful deliberation, and proposals for modification had from time to time been made. These it was Sir Frederic's duty to communicate to the architects, and the lecturer wanted to emphasise as strongly as he could that he had deliberately and possibly on his own responsibility alone always spared the architects, sometimes in opposition to their own desires, from being present and taking part in the discussion by the Commission of their designs. He had never seen an architect produce his best work when he had plunged into the fray and smitten the critics with his own strong right arm. And, after all, there were advantages sometimes in saying that the experiment they had carried out suggested ways by which the architect could be given greater freedom and a more congenial atmosphere in which to give expression to the best that was in him. It had, at any rate, convinced him that architects were much more likely to get their own way, and they must get it if England was to be saved, in the work of rural preservation and town planning if on the public advisory panels there were enough sympathetic laymen to undertake all the negotiations with the public so that the architects had not themselves to oppose error and suppress abuses.

One fact he would leave with them from which they would draw their own conclusions. The Commission had never ultimately rejected a design which Sir Frederic and he had recommended to them after it had been through the process he had outlined. On the other hand, where there had been an open competition, the Commissioners had more than once expressed a strong, though fruitless, preference for one of the designs rejected by the adjudicator, and found it at any rate momentarily more to their liking than that which he had selected.

The lecturer then showed upon the screen slides of a number of cemeteries and memorials in different parts of the world.

Major-General the Hon. Sir Granville Ryrie, High Commissioner for the Australian Commonwealth, proposed, and Lieut.-General Sir George Macdonogh seconded, a vote of thanks to the lecturer.

Dr. A. W. Hill, director of the Royal Botanic Gardens, Kew, said in the cemeteries there was some amount of horticultural work, such as the placing of trees, that led up to and enhanced the architectural features. Colour schemes, too, had been adopted. At Etaples, for instance, the soil was yellow and the flowers planted were blues, mauves and whites. Characteristic features of the cemeteries were the fine grass lawns and flowers, arranged in a British manner.

Lieut.-Col. H. P. Cart de Lafontaine said all who had been engaged on the work felt that they held a sacred trust. What had been done could be safely left to the judgment of those who came after.

Mr. H. Chalton Bradshaw, having paid a tribute to the work of the Imperial War Graves Commission,

Mr. Maurice E. Webb said he noticed that all the big memorials had been done by men who were not in the war. If any memorials still remained to be done, he hoped they might be given to the younger men who saw the war and knew war at first hand.

The President said that one remark made by the lecturer had brought home to him the fact that if the architect was to do fine things he must have the layman at his back. Until we had that we should not get great architecture in this country.

The vote of thanks was then put to the meeting and carried with acclamation, and the lecturer briefly replied.

Debates between Architects and Specialists.

A debate on the subject of "Metal Fittings of Buildings in Modern Practice" was held at the R.I.B.A on Tuesday, March 19, Mr. Henry M. Fletcher, M.A., F.R.I.B.A., Chairman of the Board of Architectural Education presiding. The debate was opened by Mr. Robert Atkinson, F.R.I.B.A., and Mr. W. G. Pringle (Messrs. Bagués, Ltd.) replied. During the subsequent discussion Mr. C. A. Llewelyn Roberts (the Birmingham Guild, Ltd.), Mr. A. J. Davis, F.R.I.B.A., Mr. E. A. Jackson (the Birmingham Guild, Ltd.), Mr. C. H. James, F.R.I.B.A., Mr. W. H. Gelson (Thos. Elsley, Ltd.), Mr. C. E. Rogers (the Crittall Manufacturing Co., Ltd.), and Mr. Howard Robertson, F.R.I.B.A., spoke.

"THE BUILDER" DEBATE

XVII.—IS THE ARCHITECT SUFFICIENTLY TECHNICAL?

Sir,—I think it time we returned to a calmer survey of the subject under discussion. I would like to assure "Negative" that I am not by any means one of those foolish people who look upon the architect as an incompetent supernumerary. On the contrary, there is nobody who realises more fully than I the difficult task he has to take on in meeting the many-sidedness of his problem. It is only out of my admiration for the generally admirable way in which he meets his problem that I venture to suggest that if he were to give just a little more attention to the technical side of it, he would not only produce better building, but would make his services to the public indispensable, and his employment a necessity.

If he is going to take up the attitude that not only is he not technical, but is not going to try to be technical, then I cannot help thinking that he is doing his cause a world of harm, and his own profession a grievous injustice. Technique is the essential equipment of the artist, whether he mixes colours on a palette, draws a bow across the strings of a violin, or exercises his vocal chord. Without technique he cannot even begin to be an artist, and without the technical knowledge of building he cannot even begin to be an architect. I cannot believe that "Negative" means to pose as a tyro in these things, but that only because he has been found out in an incompetence he attempts to lop off one of his obligations. Now, the planning of the runs of a water-service does not demand a very highly technical intelligence. It is purely a matter of common sense, occupying more time than mental anguish. Obviously, when this part of a house has not received its due measure of consideration, the architect has been either too lazy or too busy to attend to it. In neither case is the building employer likely to feel reassured. The architect owes him industry, and as much service as he pays for; which is to say, as much service as will ensure that he is getting a house that is perfect in design and construction. A house that contains pipes that are bound to freeze with every frost, unless certain inconvenient and uncomfortable measures are taken, cannot be said to be perfectly constructed.

But "Negative" is quite right to draw attention to my neglect of the other technical matters which the motion implies. I do not wish to withdraw a single letter from this same motion. It is not only the question of plumbing, though events have conspired to thrust this aspect of the question to the front. It is a much wider question than that. Take the matter of constructional steelwork. I do not say for one minute that an architect should have to work out all the complicated calculations by which a steel structure is designed; but I do say, most emphatically, that he should be able to do so with ease and understanding, because this is the actual structure which he has to express in architectural terms, and he cannot be expected to express it faithfully if he does not understand the nature of the thing he is handling. Is it not a fact that not one architect in twenty could produce a correct steel structure out of his own knowledge, and are not the most eminent of our architects the worst offenders in this respect?

Again, I repeatedly come across a house which bears most of the evidence of thoughtful planning, but is yet marred by some unsightly heating pipe dropping from the clouds, or crawling gracelessly round a corner. I regard these things as evidence of the afterthought, and originating from an insufficient study of technical details. Can the average architect design a heating system, or has he the slightest idea whether the scheme put before him is adequate, or wasteful?

Again, I would like to ask whether the average architect has the slightest real knowledge of the quality of timber? Judging from the shrinkage we see all round us to-day I think it extremely unlikely. He will tell you it is the War that has done it. He will probably go on telling you this until the excuse is worn out. But the real root of the matter is that whereas before the War he knew that certain merchants could be relied upon to give seasoned timber, now he must judge for himself. We shall continue to be flooded with green stuff until the architect has learned afresh to discriminate.

I mention these other things not because I have the last official word in this debate, but to show that the matter of badly arranged plumbing does not stand alone as an exception to the complete competence of the architect.

I hope I have succeeded in readjusting "Negative's" preconception of me, and in inducing him to look within once more to judge whether his complaisance is justified.

POSITIVE.

ILLUSTRATIONS

PLATES

"Yorkshire House," Chapel-street, Liverpool.

In planning this building particular attention was devoted to securing as large a window area as possible, in order to produce a scheme which would satisfy the requirements of a modern office building. The resultant effect on the façade has been to reduce the proportions of solids and increase those of voids, thereby giving the building a lighter aspect.

The proposed widening of Chapel-street to 60 feet and the subsequent negotiation by the Liverpool Corporation for land co-extensive with the building's Chapel-street front, and for an average depth of 20 feet, compelled, in view of the reduced letting area, an economic planning of corridors and staircase. The light well, essential for the lighting of the rear portion of the building, has also been reduced as far as practicable. It was also found desirable to place the keeper's quarters above the flat roof and a portion of the lavatory accommodation and lift motor room. A sub-basement was also decided upon to accommodate the heating apparatus, which will burn oil fuel; the fitting of automatic burners to the firing apparatus secures an economic use of fuel. Fuel storage space is reduced, and any nuisance arising from the removal of ashes, as in the case of coke firing, is obviated. The whole of the basement floor is available as letting space, having a separate entrance direct from Chapel-street. Steel-framed construction supports the whole of the superstructure, reinforced concrete floors and roofs.

The fronts have been designed on classical lines, and ornamentation is used sparingly. The façades to Chapel-street and Rumford-place are faced with Whitbed Portland stone on a plinth of grey Aberdeen granite (not polished) to ground floor level. The main entrance, which is situated centrally on the Chapel-street front, is flanked by two pairs of engaged columns, inside which are bronze entrance doors, embellished with bronze shields bearing the Arms of the City of York.

Immediately above the doors a bronze grille is designed as a point of interest through which, when the doors are closed, light will penetrate. Metal windows combined with the use of ornamental cast-iron panels, provide the main feature above the first floor, throwing into relief square columns terminating with carved caps at the fourth floor level, whilst to obtain a sense of solidity and cohesion of the mass, the end bays to each front are constructed entirely in stone with windows proportionate to their width. Above the main cornice at fifth floor level the building face recedes 2 ft. from the general building line. Green slates obtained from the quarries at Cilcen are employed as covering to the mansard roof, whilst projecting therefrom large dormer windows give light to the sixth floor. The keeper's accommodation is in a separate block above the flat.

Hopton Wood stone and Tinos marble paving laid to a geometrical design has been laid in the entrance hall. It was felt that the entrance walls called for certain elaborate treatment, and teak panelling and stucco work constitute the medium for this decoration. Reeded Doric pilasters at intervals in the panelling support a full cornice from which springs a coffered barrel vault carried out in French stuc. A glazed pair of swing doors effectively closes the hall from draught. Terrazzo has been used as wall finishing to a height of 4 ft. 6 in. to the staircase and corridors. Above this dado French stuc jointed to represent stone is employed to complete the wall finish up to ceiling height. The staircase hall is situated centrally in the building, thereby minimising corridors, and giving easy access to the offices on the upper floors. The staircase is constructed of reinforced concrete throughout; the stair treads being treated with carborundum and white cement to ensure a non-slip surface. Within the stair well two high-speed electric lifts placed side by side will convey passengers to all floors; each car being built to accommodate nine persons. A wrought-iron enclosure is fitted around the lift shaft with collapsible gates arranged at lift entrances. The enclosure will also act as balustrading to the main stair, being fitted with brackets to support a hardwood hand-rail. The concrete floors are finished with pitch pine board secret nailed to wood bearers. The walls to offices are finished with an approved tint of wall preparation in the form of paint. Any further treatment of walls will be left for the tenant to arrange. Fibrous plaster cornices are used to cover the main floor beams where visible and fibrous plaster plates to ceiling panels.

The "Yorkshire" staff is housed mainly on the first floor, the entrance to this suite being designed in English walnut.

Messrs. W. Tomkinson and Sons, of Liverpool, were the general contractors, and the following were sub-contractors: Redpath, Brown and Co., Ltd., Manchester, steelwork; Trussed Concrete Steel Co., Liverpool, concrete floors; Bromsgrove Guild, Ltd., Bromsgrove, bronzework; H. Shepherdson, Stockport, panelling, etc.; Williams and Watson, Liverpool, glazing; Wm. Kirkpatrick, Ltd., Manchester, granite; Musgraves, Ltd., Liverpool, sanitary fittings; Waygood Otis, Ltd., Liverpool, lifts; Rockwood Terrazzo Co., Manchester, terrazzo; J. B. Johnson and Co., Liverpool, plastering; Ragusa Asphalte Co., Manchester, asphalt; John Wallace and Sons, Liverpool, marble work; Mellowes and Co., Sheffield, metal windows; Ashwell and Nesbit, Ltd., Manchester, heating; Lindsay and Co., Liverpool, electrical work; J. Galsworthy, Ltd., London, electric fittings; H. G. Hiller and Co., Liverpool, lead lights; W. A. Mawdsley and Co., Bootle, wood flooring.

Messrs. T. Wainwright and Sons (Mr. J. B. Hutchins, F.S.I.) are the architects.

R.I.B.A. Garage Competition.

The awards in this competition are given under Competition News (page 676), and the first and second premiated designs are illustrated in this issue.

The Petrol Sign Competition.

The National Signs for Petrol-filling Stations now shown at the Institute are disappointing on the whole. The design placed first has its good points, but there are some others which from an architectural point of view seem to us to be better. The first-placed design is simply an upright post with a hanging signboard projecting from it; whereas another design, upheld from an upright post with a lamp above it, is better in form and distinction and proclaims its purpose better, as the crowning lamp would be an outstanding feature, especially at night, when the light was on. Then, what about the "Stormy Petrel" design? Surely this is both striking and appropriate. A Stormy Petrel with outspread wings stands on a globe supported on a post. It would be in luminous paint, and near the head of the post is a bracket, hanging from which is an open shield containing gilded stars.

Cemetery Chapels, Lodge and Waiting Room, Camberwell.

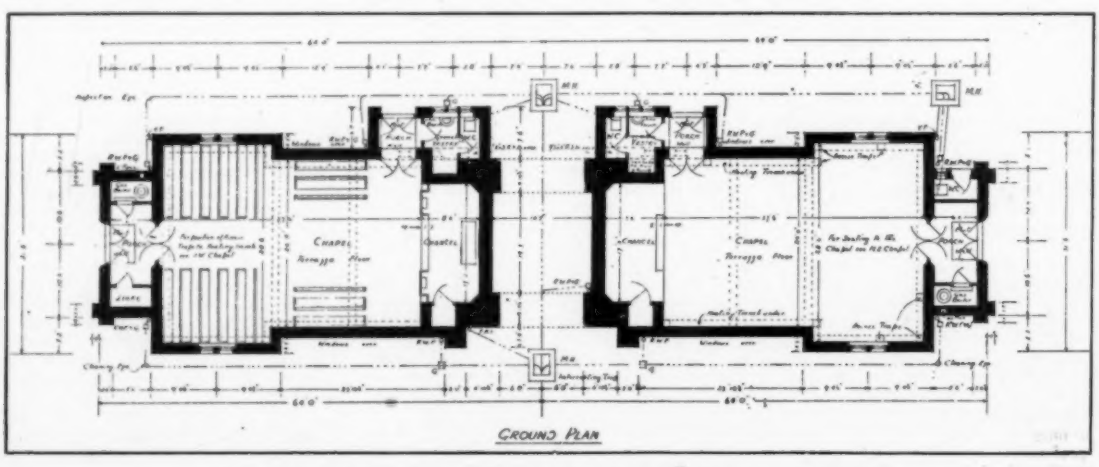
The buildings now in course of erection for the Camberwell Borough Council in their new Cemetery comprise two chapels, a lodge and waiting room, the two latter for those attending funerals. All three buildings are being built of Bargate stone facings with Portland stone dressings and Westmorland green slate roofs laid in diminishing courses, on a fine site in Honor Oak. The one piece of sculpture on the building, namely, the angel over the entrance between the two chapels, is being executed by Mr. L. F. Roslyn, R.B.S. The plans illustrate the general arrangement of the two chapels, which is dictated by the necessity of dealing with a large number of funerals at the same time. Messrs. Galbraith Bros., Ltd., of Waterloo-street, Camberwell, are the general contractors, and Mr. E. R. Blakemore the clerk of works.

Sir Aston Webb & Son are the architects.

[The list of contractors employed will be found on page 707.]

Galle Face Court, Colombo.

This new building is now being erected in a prominent position at the Galle Face, Colombo, on the sea front. The ground floor consists of shops and the upper floors contain thirty-nine service flats of modern design. The architects are Messrs. Edwards, Reid and Booth, F. and AA.R.I.B.A., of Colombo.



Plan of New Cemetery Chapels for the Camberwell Borough Council.

Sir Aston Webb & Son, Architects.

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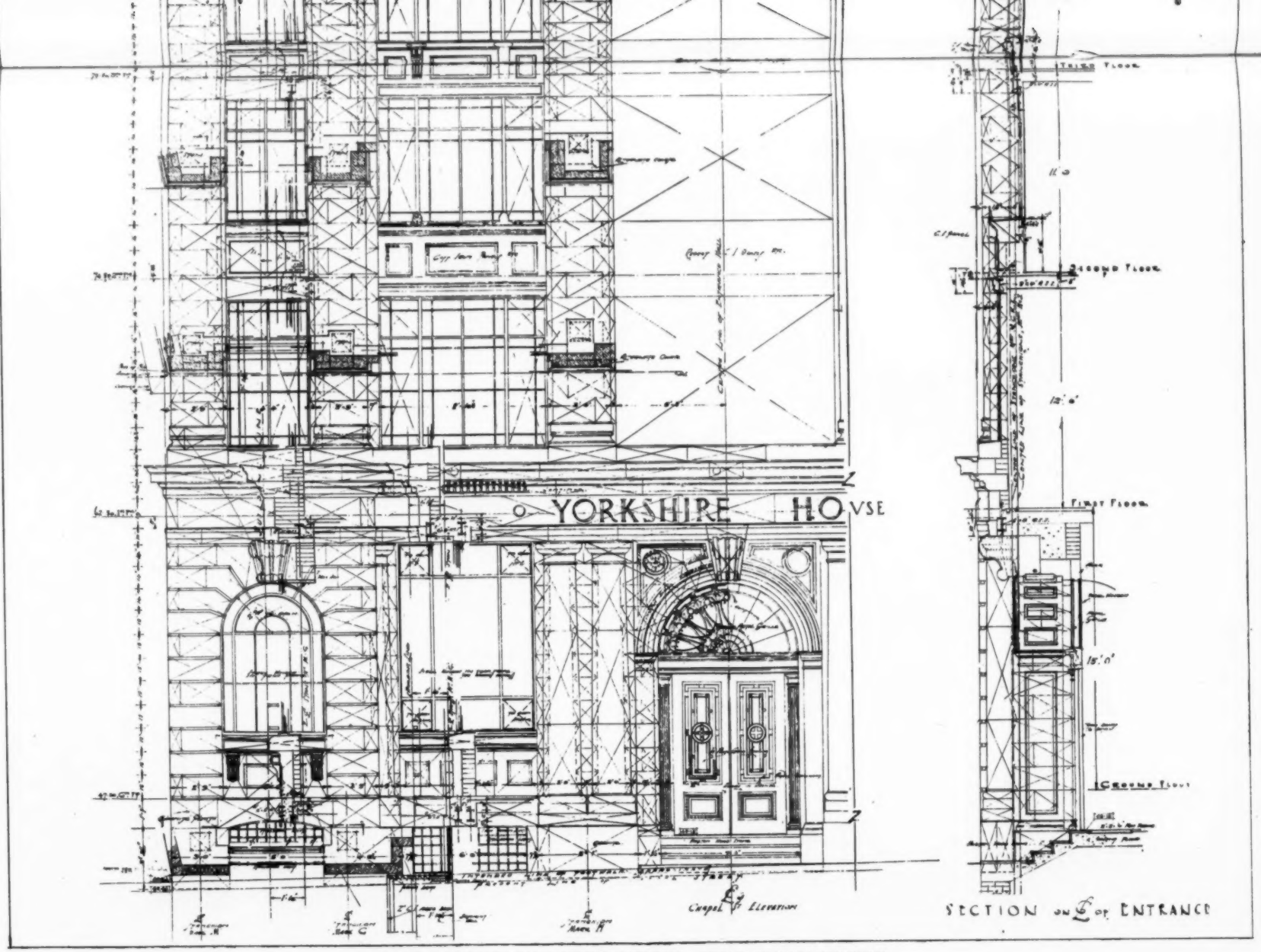
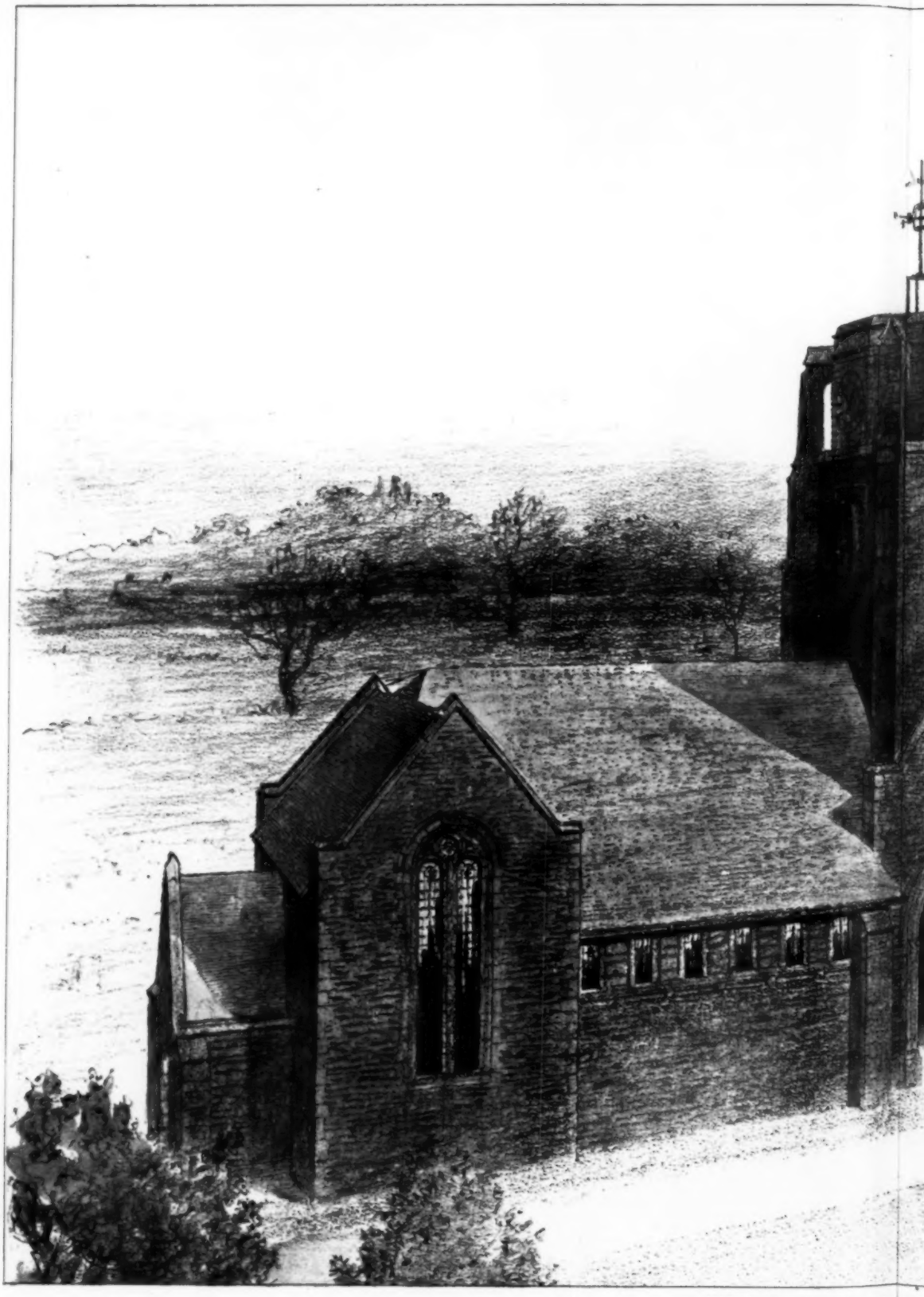
Fifth Floor
Fourth Floor

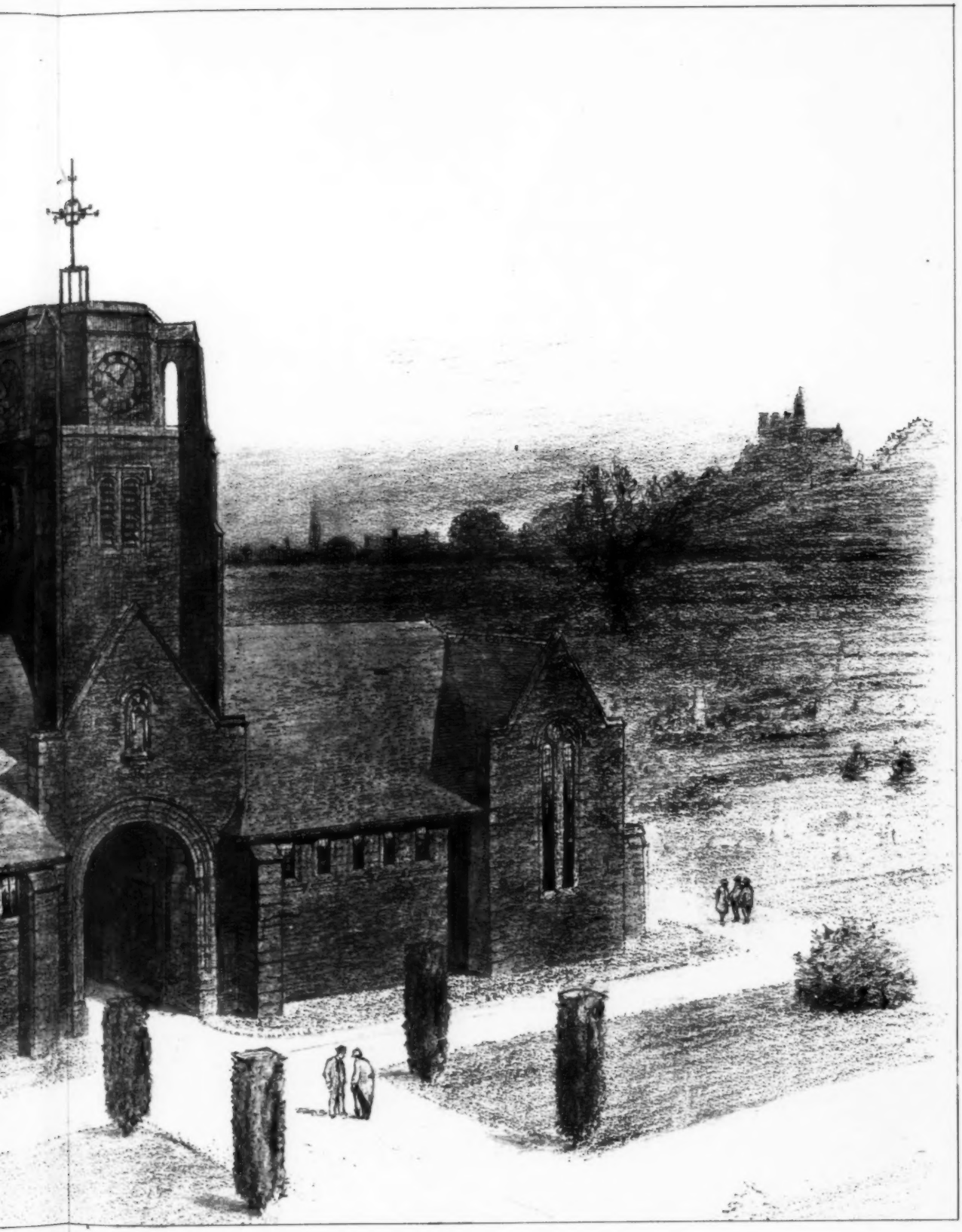


"YORKSHIRE HOUSE," CHAPEL STREET, LIVERPOOL: DETAIL OF HALF ELEVATION.

Messrs. T. Wainwright & Sons (Mr. J. B. Hutchins, F.S.I.), Architects.



NEW CEMETERY CHAPEL FOR THE
Sir Aston Webb &



CHAPEL FOR THE CAMBERWELL BOROUGH COUNCIL.
ir Aston Webb & Son, Architects.

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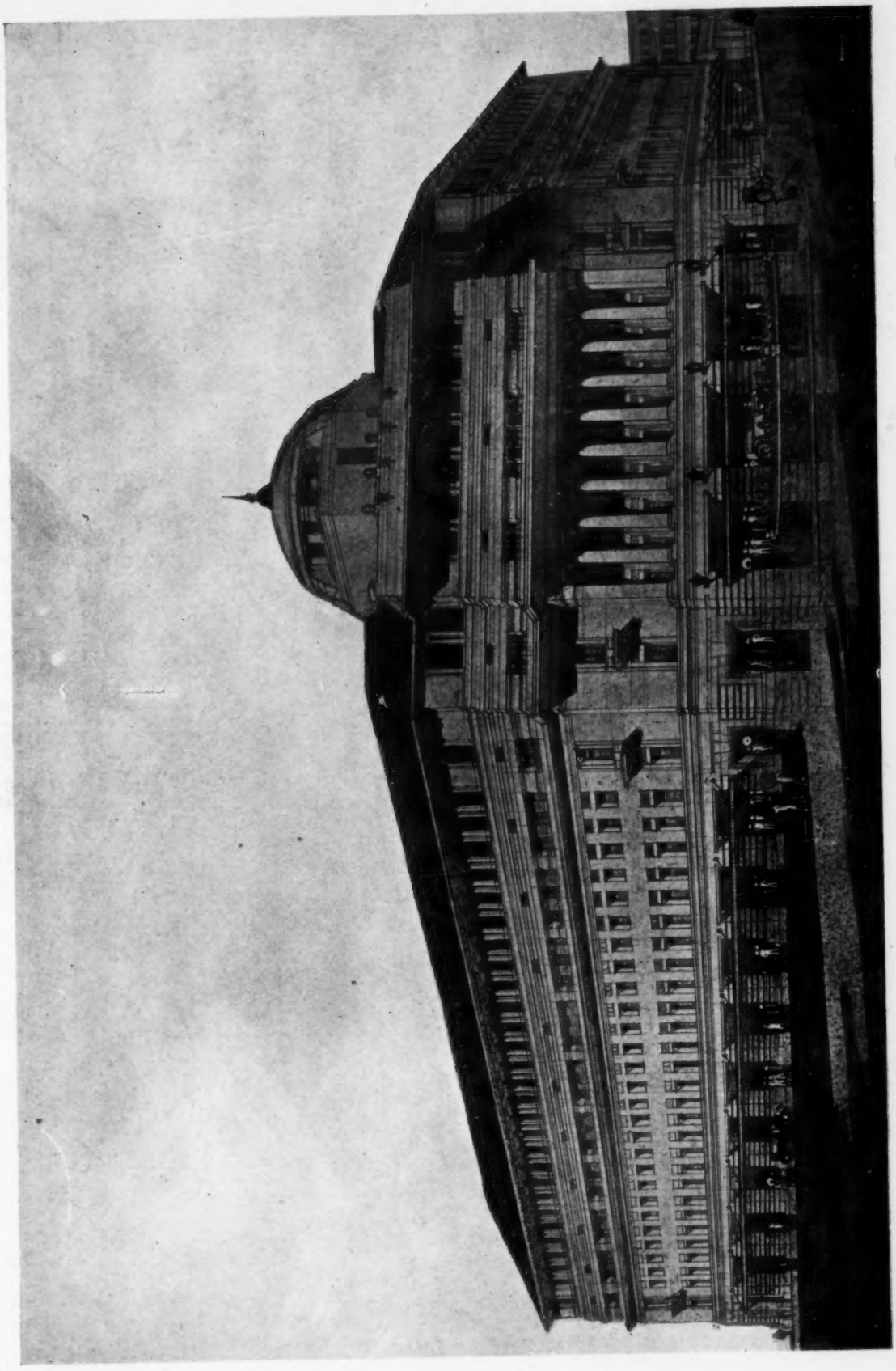

"Galle Face Court," Colombo.

Messrs. Edwards, Reid & Booth, F. and A.A.R.I.B.A., Architects.

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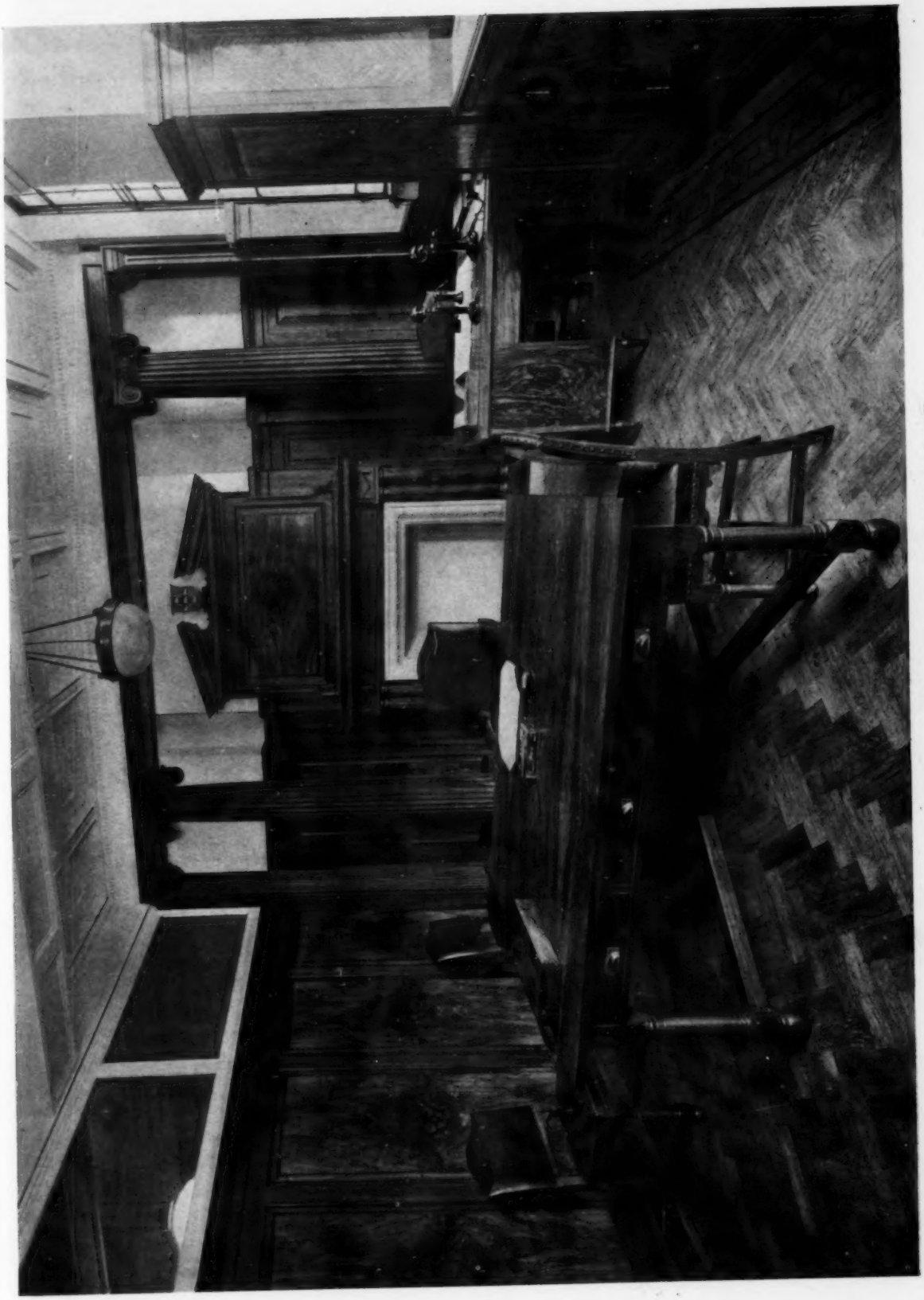

"Yorkshire House," Chapel Street, Liverpool: Manager's Office.
Messrs. T. Wainwright & Sons (Mr. J. B. Hutchins, F.S.I.), Architects.

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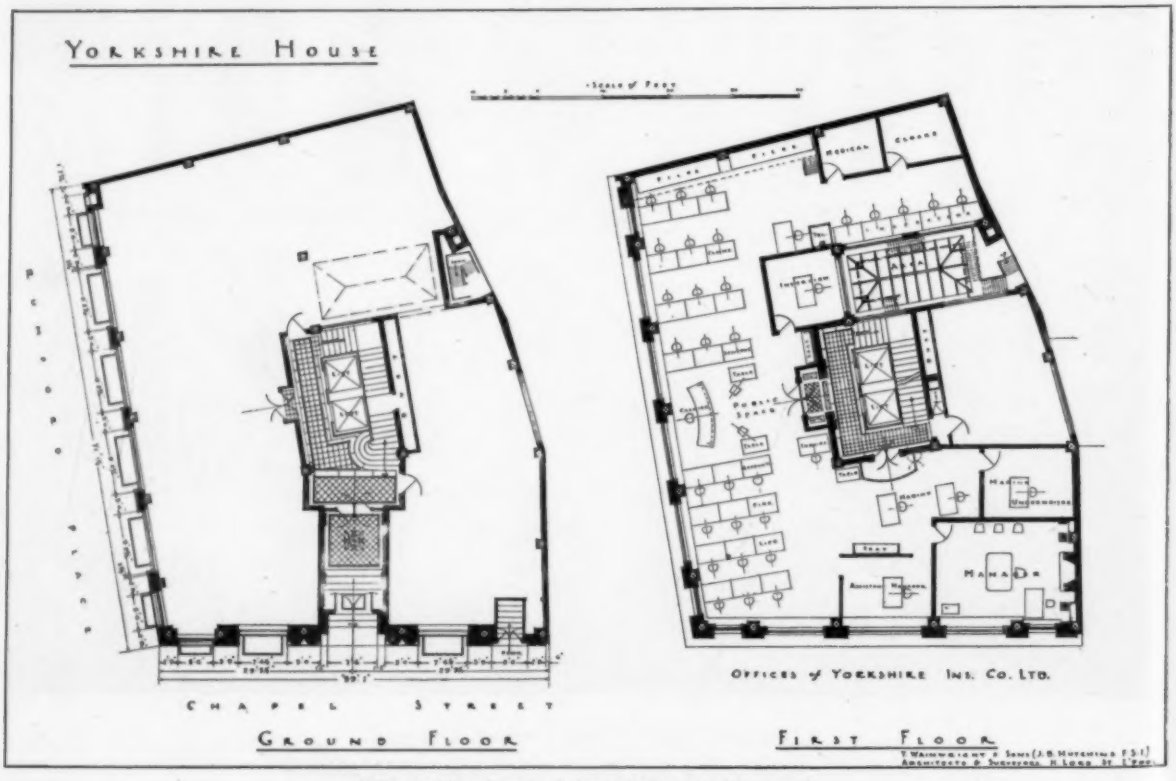
"Yorkshire House," Chapel Street, Liverpool.

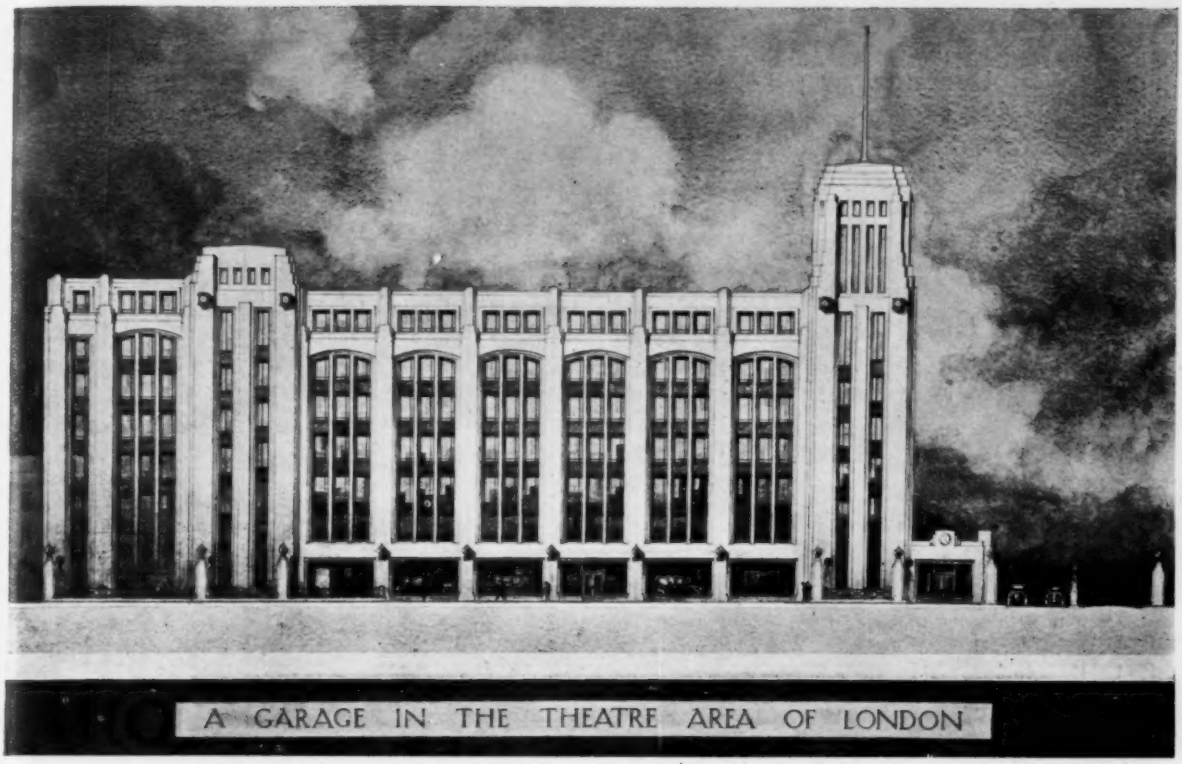
Messrs. T. Wainwright & Sons (Mr. J. B. Hutchins, F.S.I.), Architects.

General Office.

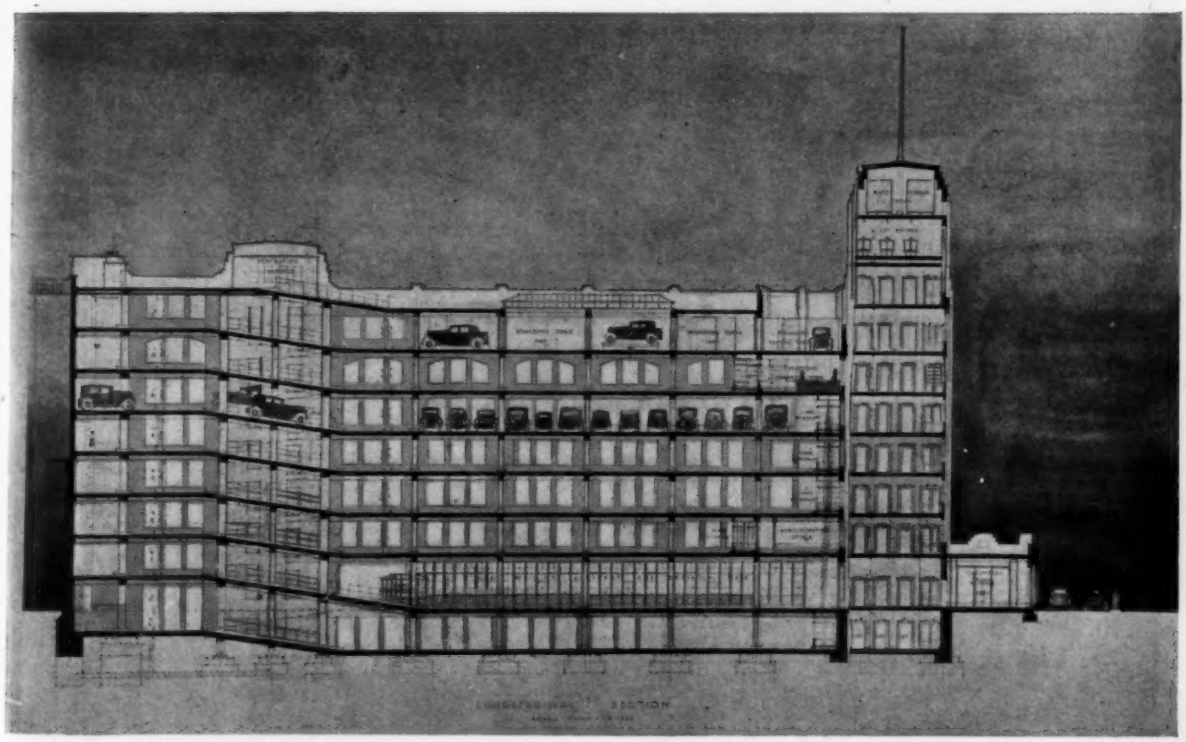


"Yorkshire House," Chapel Street, Liverpool.

Messrs. T. Wainwright & Sons (Mr. J. B. Hutchins, F.S.I.), Architects.

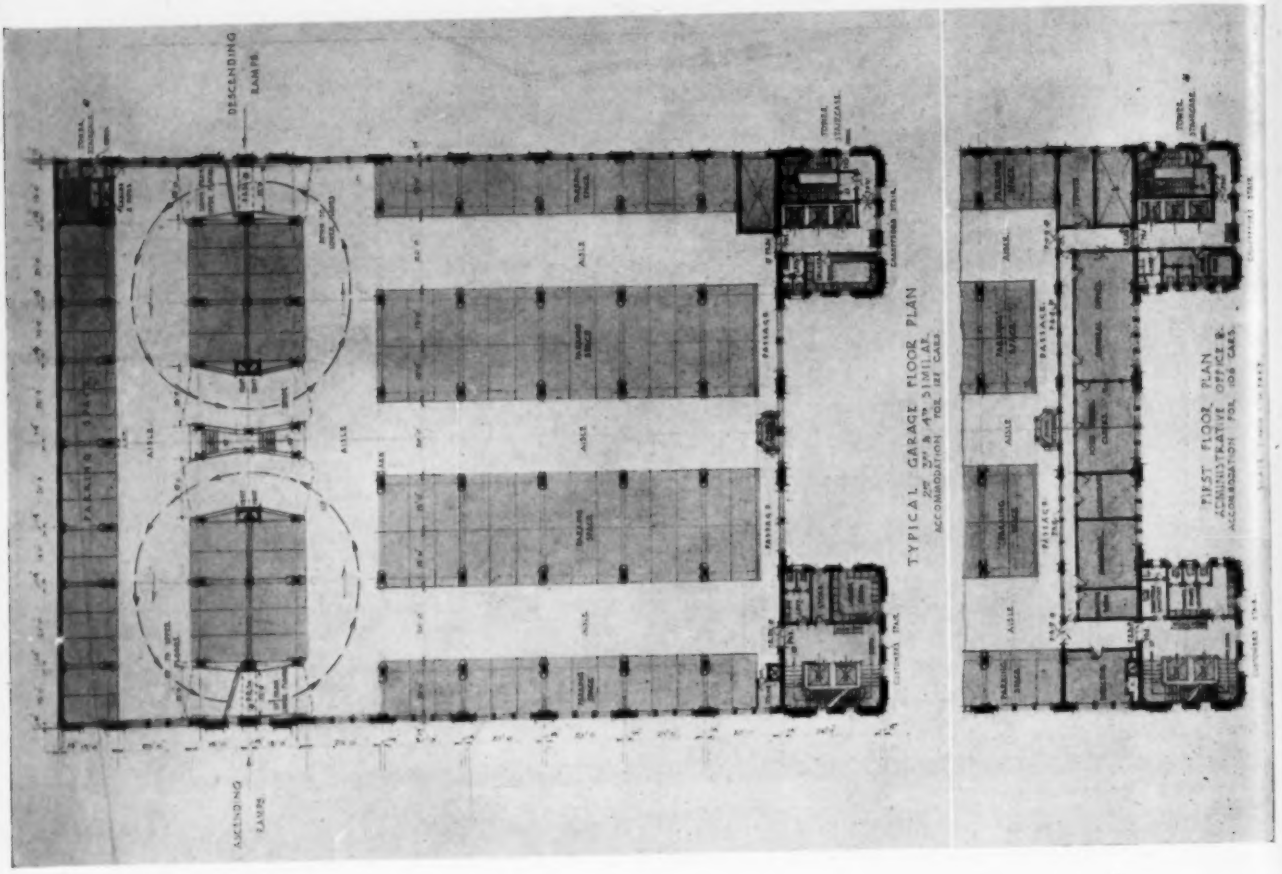


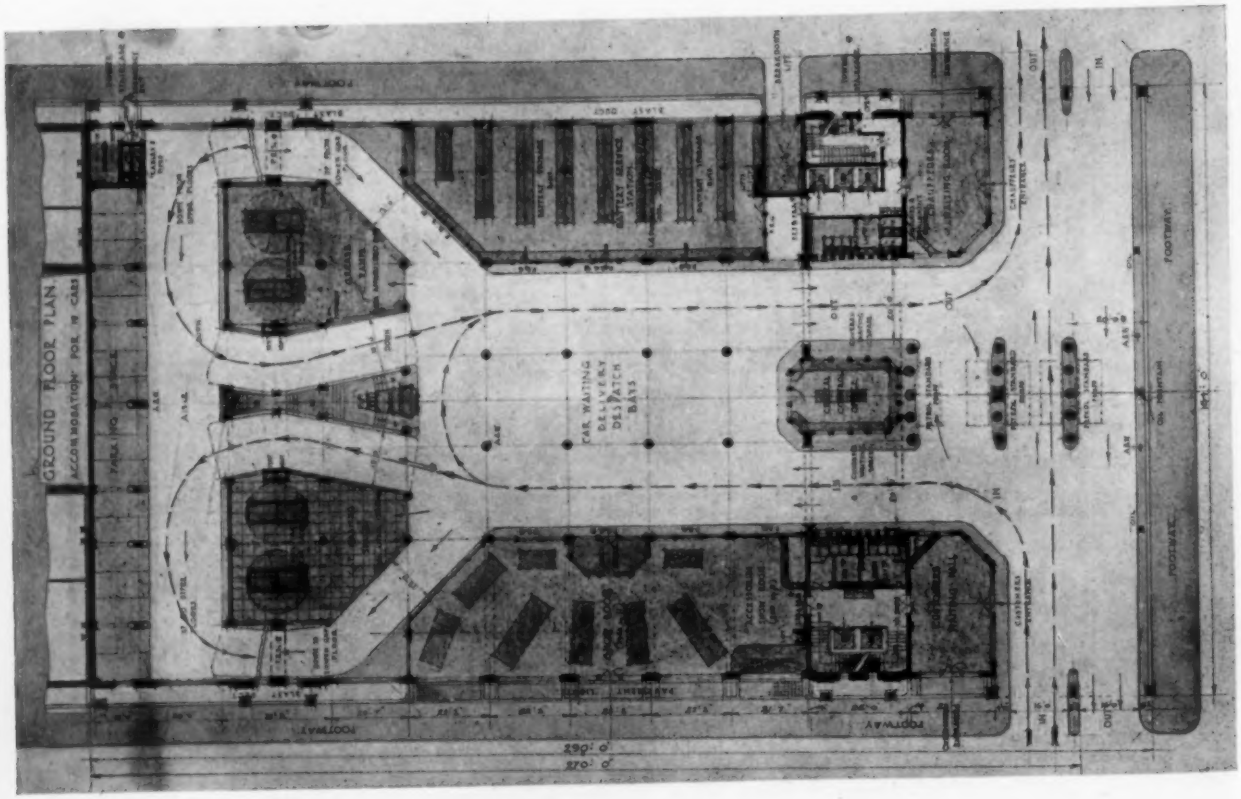
Elevation.



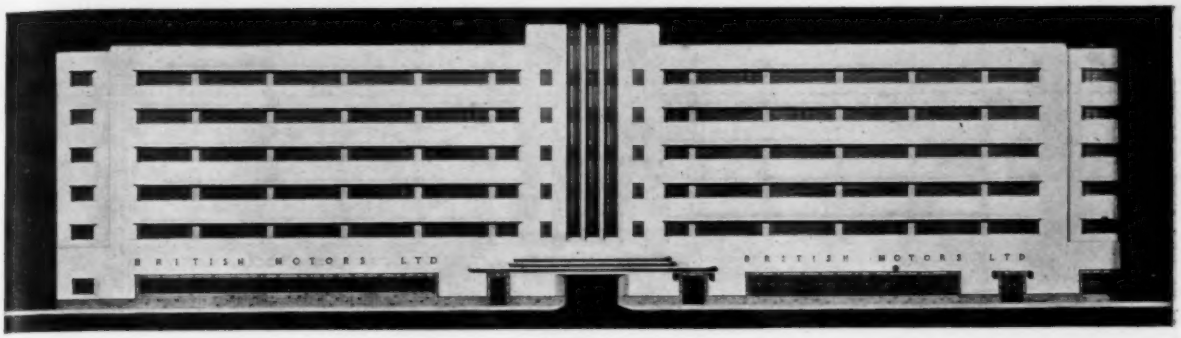
R.I.B.A. Competition for Design of a Garage in the Theatre Area of London: First Premiated Design.

By Mr. Thomas Spencer, A.R.I.B.A.

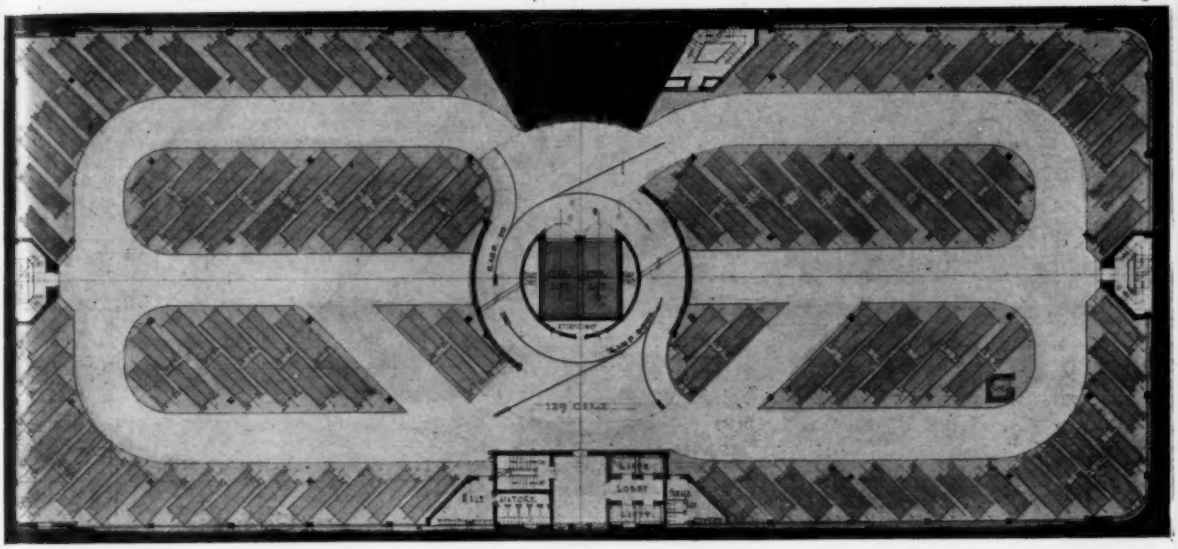




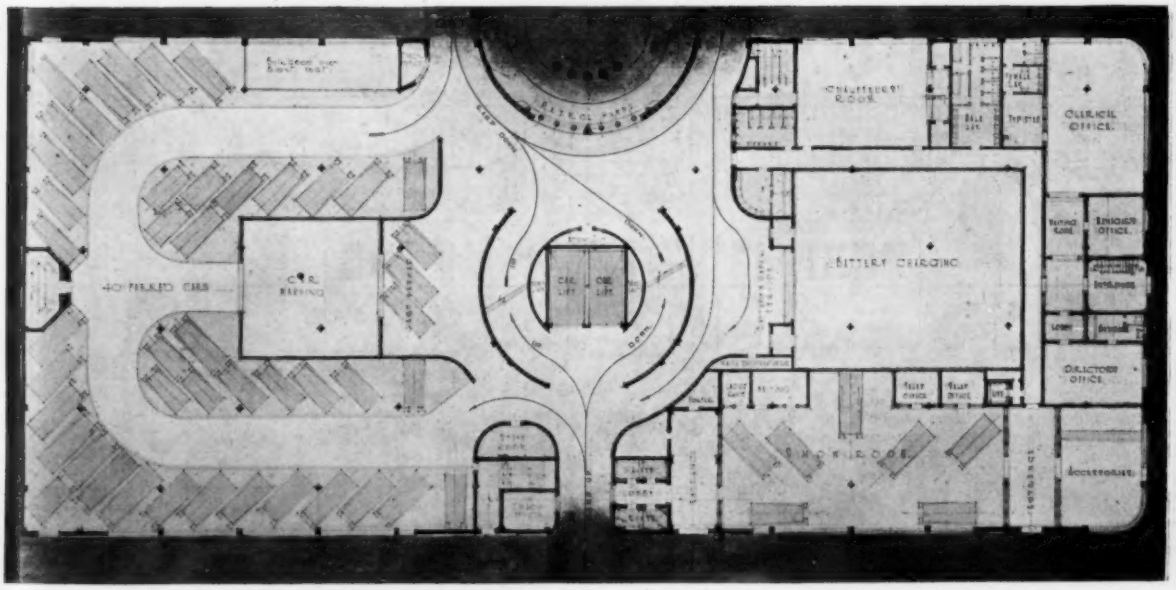
R.I.B.A. Competition for Design of a Garage in the Theatre Area of London: First Premiated Design. By Mr. Thomas Spencer, A.R.I.B.A.



Elevation.



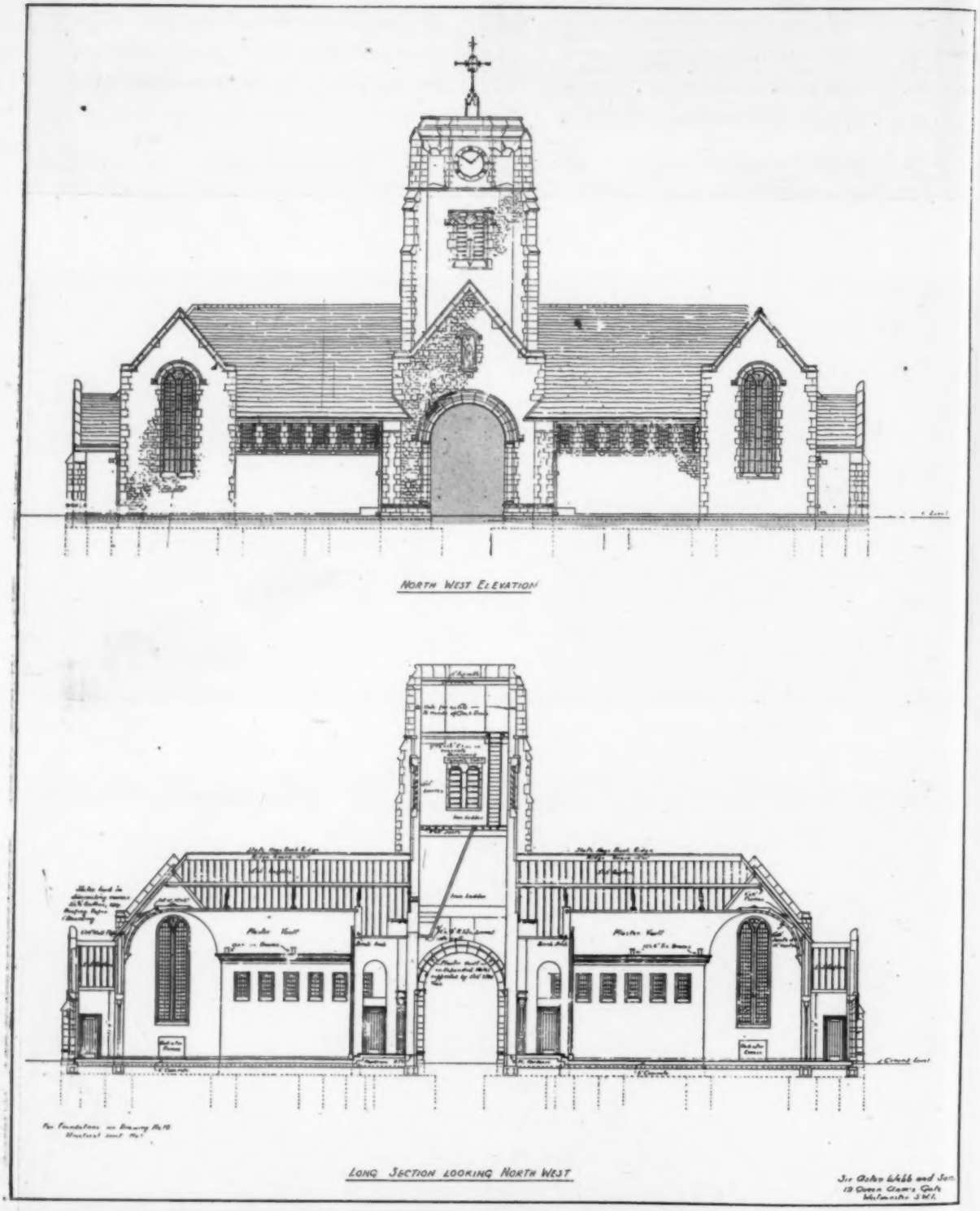
First-floor Plan.



Ground-floor Plan.

R.I.B.A. Competition for Design of a Garage in the Theatre Area of London: Second Premiated Design.

By Messrs. T. H. Newton and Oscar A. Gayne.



New Cemetery Chapels for the Camberwell Borough Council.

Sir Aston Webb & Son, Architects

THE PANTHEON, ROME

The Rome correspondent of the *Times* has given an account of the work of construction now being carried out on this building by Signor G. Cozzo, the engineer, from which we take the following excerpts :—

"Signor Cozzo's main contention, come to as a result of these investigations, may be summarised as follows. The Rotunda is formed of a massive circular ring of masonry some 20 ft. thick, divided into 16 equal parts. Corresponding to eight of these sections are eight enormous piers, and beneath the remaining eight are the various chapels, the apse, and entrance. Each of these chapels is surmounted by a double row of large superimposed arches which, extending through the concrete of the drum, are visible from the outside. The researches on the cupola show that the higher row of arches does not reach the intrados of the dome, from which it is distinct, about 2 ft. nearer the centre. Signor Cozzo noted, therefore, that these arches must have been constructed independently of the remaining masonry that constitutes the drum. Hence it would be possible in theory to remove the masonry from under each one of these great arches, with the result that the dome of the Pantheon would be carried simply by the eight piers and their connecting arches.

"Signor Cozzo has also attempted to prove —and his theory has been widely accepted— that, when originally built, the Rotunda must have had its entrance on the opposite side to the present one. The large rectangular hall, the ruins of which are at the back of the building, until now thought to have been part of the Baths of Agrippa, was, says Signor Cozzo, the original atrium or entrance porch. A threatened collapse, however, due to the breaking of the foundation ring, made it necessary to wall up this entrance, transform it into the present apse, and to make another entrance exactly opposite. This is the origin of the imposing portico that we see to-day, which has no connection, either structural or architectural, with the Rotunda itself. This discovery might well confirm the hypothesis of some archæologists that the Pantheon was originally designed as a portion of Agrippa's baths, perhaps as a great hall or meeting place for the patrons."

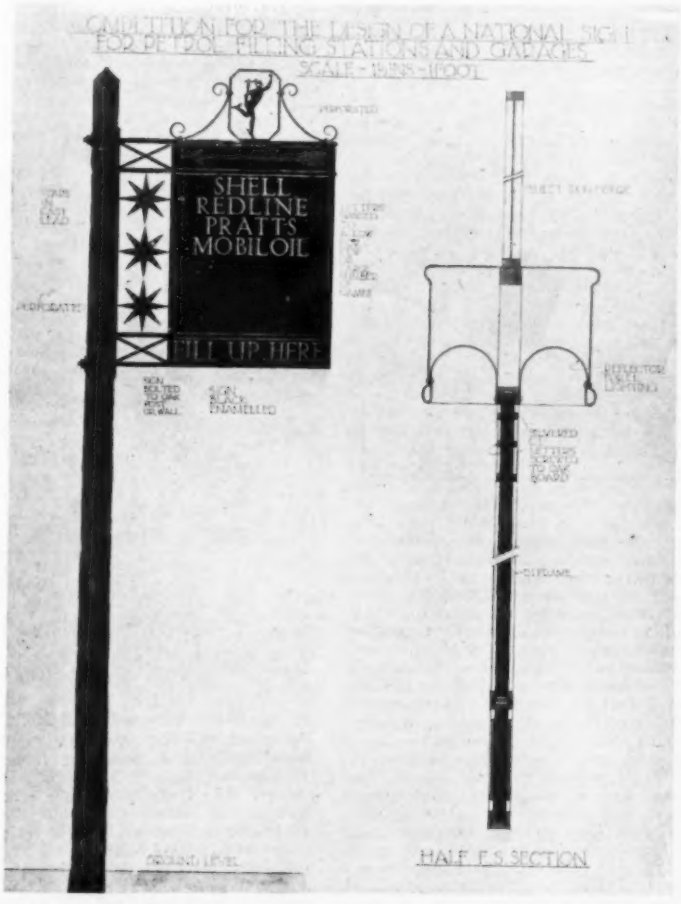
BRITISH COLUMBIAN ARTS

An interesting exhibition of the arts and crafts of the Indians of British Columbia was opened on Wednesday, March 27, by Mrs. L. S. Amery, at the Exhibition Pavilion of the Imperial Institute, S.W.7. The collection has been made and is lent by Mr. A. C. Bossom, F.R.I.B.A., and Mrs. Bossom.

Mrs. Amery, in opening the exhibition, said that she wished to pay a tribute to the work of Sir William Furse, director of the Imperial Institute, whose faith and devotion to a patriotic ideal were reflected in the Empire exhibits at that institution.

Mr. F. A. Pauline, Agent-General for British Columbia, said that the collection was a unique display of native Indian handicrafts of the province. It could not possibly be duplicated to-day, because there were very few native Indians alive who could produce the same kind of handicrafts, which showed a high degree of skill. Their carvings were done entirely with the aid of the judgment of the eye, for they had no other means of measuring proportions. He recalled a story of how the sloop *Beaver*, which was built at Gravesend in 1835 for the Hudson's Bay Company, was visiting the coast villages of British Columbia in 1860. A month later the sloop had occasion to revisit one village, and found a miniature replica of itself putting off from the shore to meet it. The natives had, in the meantime, made the replica of the craft themselves, and had even copied it to the extent of having smoke issuing from a funnel from a fire of burning leaves, and some of their number were also turning its paddle wheels.

Mr. A. C. Bossom, referring to the permanent exhibits at the Imperial Institute, said that he thought their educational value ought to be more recognised by the schools. He considered that visits of school children to the Institute should be made a compulsory feature of the curriculum of London schools, and that a portion of the immense collection at the Institute should be circulated through Britain periodically for instructional purposes.



R.I.B.A. Competition for Design of National Sign for Petrol Filling Stations and Garages : Winning Design. By Mr. R. L. Gould. **(See pages 676, 680).**

Design submitted in the "Petrol Sign" Competition.

NEW HEADQUARTERS FOR THE R.I.B.A.

The Royal Institute of British Architects has acquired the site of four mansions in Portland Place and various houses in Weymouth Street. On this corner site of over 15,000 superficial feet the Institute will erect a building to serve as its headquarters in place of the existing premises in Conduit Street. The site is on the eastern side of Portland Place, Nos 62, 64, 66, and 68, with a return frontage to the north side of Weymouth Street (approximately indicated in the accompanying plan). Possession of the houses will shortly be obtained, as the last of the existing interests expires some time next year. By the end of 1930 it may be possible to proceed with the erection of the new premises.

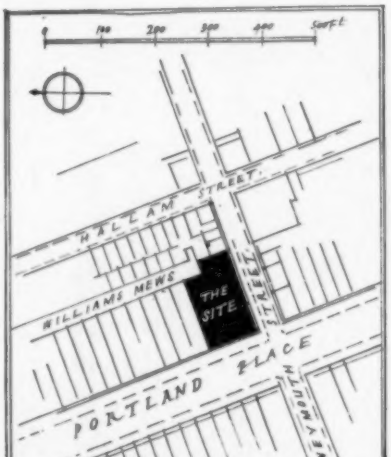
The present premises in Conduit Street have long been outgrown. They were originally, some 80 years ago, provided as a proprietary venture for housing the Institute and other architectural movements of that period. In time some of these ceased, and part of the premises passed for some years to other uses. For a long while, however, the whole building and adjoining premises in Conduit Street have been in the occupation of the Institute.

The proposed new building will be the first of its kind in Portland Place, and it will also represent in all probability the beginning of a movement to make Portland Place a centre for leading professional organisations. There have for a long period been flats in some of the houses, but a very large proportion of them remain to-day in private occupation, many notable men residing there. That Portland Place would undergo great changes in character has been foreseen for many years, and one of the possibilities occasionally discussed has been that it would become commercialised. In common with any alteration of its purely residential and professional character, such a change must inevitably involve the reconstruction of the houses. So soon as any part of the frontage is changed the days of the whole of the Adam elevations may be regarded as numbered. In the case of the present acquisition it has been decided to erect premises that both within and without will be specially designed for their purpose, and, therefore, though not striking a discordant architectural note, no longer harmonising with the Adam frontages. Thie transfer of the headquarters of the R.I.B.A. makes the first great innovation in the nature of the Adam thoroughfare.

The scheme will necessarily involve a very large expenditure. Fortunately for the Institute, its authorities have for years used much of their surplus funds in the acquisition of premises in Conduit Street, and they have, therefore, for realisation in due course, a property that has shown a steady increase in value and that is now more than ever appreciated. It is within the area that derives advantage in value from proximity to Regent Street, and in a position that must be most favourably influenced in value by the changes involved in the commercialisation of parts of Mayfair. In the event of the project for a new street from the south of Berkeley Square being carried out the price of property in Conduit Street will receive another upward thrust. Thus, the Institute, when it comes to realise its Conduit Street premises, will have, at any rate, the nucleus of an adequate fund for the rehousing in Portland Place.

Apropos of Portland Place, the *Times* recalls that the Brothers Adam prepared their designs by getting out a great number of plans and elevations for separate mansions, as well as a design for the entire west side of the place. As often happened with the Adams, necessity, and the decisions of their clients, led to a material modification of their designs. How this operated in Portland Place can be seen by anyone who will consult the Adam papers in the Soane Museum. So great was the deviation from the original ideas of Robert Adam about Portland Place that it is said he lost his enthusiasm for the work, and left what remained of his conception of "a street of palaces" to James Adam, who, in turn, seems to have relaxed a detailed supervision of building there. But the essentials of dignity and harmony were fixed from the beginning, and a great deal of Adam detail enriches most, if not all, of the houses. Those that still remain in purely private occupation are among the finest in London. Many have, however, been divided into flats, and the value of sites for the erection of a new type of building is becoming so great that further changes seem inevitable.

The houses were designed by Robert Adam in 1778, and the street took its name from the then ground landlord. The full scheme of Portland Place originally included a complete circus, but the half of the proposed circus, now known as Park Crescent, came into being in 1816, under the inspiration of Nash, who called it "the key to Marylebone Park." The land that would have been covered by the other half of the circus, on the Regent's Park side of Marylebone Road, was left vacant, and instead houses designated Park Square were built. Nash's original plan in laying out Regent Street had been for a grand avenue, of which Portland Place would have formed part, leading to a Royal palace in the centre of Regent's Park, but that was among the projects that were dropped.



A correspondent of the *Observer* states that we may contemplate the possibility of the street being rebuilt in a manner worthy of its traditions. "But," he continues, "it will be yet another—and the worst—of London's architectural tragedies if the buildings are allowed to go up piecemeal, without any thought as to a harmonious scheme. We have before us the example of Oxford Street—surely the ugliest main street in Christendom, leaving out Charing Cross Road, which is the most terrible—and we have the example of Regent Street, which, in spite of all the criticisms, has more dignity and commercial value than any other street in the West End. The unified treatment of Regent Street was easily possible because one body owns all the land—the Crown. The cases of Regent Street and Portland Place are exactly comparable; for as it is with the Crown in Regent Street so it is with the Howard de Walden Estate in Portland Place—there is one ruling authority."

EXHIBITION NOTES

THE ROYAL INSTITUTE OF PAINTERS.

There are just about 500 pictures in the 120th exhibition of the Royal Institute of Painters in Water-Colour, now open, and the collection includes several subjects which arrest attention for their vigour of treatment. We should like the show better if the crimson walls might be changed, and the centre carpet also, for the two colours are very inharmonicus.

This is one of the best of recent exhibitions, especially in the excellence of landscape pictures, which include many of a really good quality, showing much refinement and good choice of subject.

The president, Sir David Murray, has a large picture of a very agreeable subject, but it is hardly the best essay as to its colour, though showing all his well-known technical ability. Frank Spenlove-Spenlove has a good picture of murky London, though it does not suggest a foggy atmosphere. A clever and telling view from an air liner by Norman Wilkinson shows the curious contours of land about Jerusalem and Bethlehem. "The Thaw" is a good drawing of snowy landscape by Wm. Hoggatt. "Katwyk Dunes" is a good composition by F. Stuart Richardson, painted with a freedom of touch which is refreshing after the many solidly painted and tight drawings one sees so much of. Arthur Severn gives us another of his vivid landscapes (386), which is rather spoilt by the handling of the clouds. "Decayed Nobility" (383) by Fred Taylor is a fine study of old Venice in its treatment of detail and colour, but we seem too close up to the picture to get the right feeling; it would, perhaps, have been better with more foreground. The Star Inn, Alfriston, is well set forth (369) by F. C. Unity. Terrick Williams gives us a nice passage of colour in "A Canal" (327). Alfred B. Yeates has a tender little landscape in his "Meadows at Dieppe" (326). The Bridge, Orthey (321) is a vigorous drawing—nice colour, but rather hard in effect. An interesting bit of old architecture is the tinsmith's shop at Dinan, very pleasantly drawn in good colour by Frank Sherwin. Jas. Clark has a crisp little drawing of Richmond Castle (309). An excellent little drawing is a Welsh landscape (297) by Martin Hardie. Light and colour are admirably expressed in Wilmington Downs (291) by Harold Swanwick. Good colour quality is always to be found in the work of Terrick Williams, as, for instance, in "Bignasco" (269). Gerald Ackermann in his Walberwick drawing (270) has produced a very pleasing landscape in good colour and with an admirable atmosphere. A very good drawing of "The Choir and Apse of Westminster Abbey" (487) by Henry C. Brewer, good as it is, does not seem to convey the reality quite as we know it. An impressive picture is "The Rescue" (440) by Norman Wilkinson, with a fine effect of colour and light. Nos. 5, 14, 44, 50, 65, 71, 228, 225, 209, 185, 182, 181, 163, might all be noted for good qualities. Architectural subjects are in good evidence in 130, 155, 151, 175, 257, 450, and 446. A well-known architectural subject is "The Old Fountain at Villeneuve" (208) by C. H. H. Burleigh, and a charming sketch is the "South Porch of Harfleur" (166) by H. C. Brewer.

Water-Colours in Pall Mall.

We find the old Water-Colour Society's Exhibition in Pall Mall (the 192nd) rather dull and lacking in anything of outstanding quality. The technique is of a good average quality, but neither the subjects nor their treatment can be said to be stimulating. There is admirable quality such as in the Yorkshire Moors drawn by A. Reginald Smith, Walberwick by W. T. Wood, the small landscapes by Oliver Hall, and the clever drawings of horseflesh by A. J. Munnings, but there seems nothing out of the respectable average to call for special notice.

SPANISH CHURCH ARCHITECTURE

SHEFFIELD, SOUTH YORKSHIRE AND DISTRICT SOCIETY OF ARCHITECTS AND SURVEYORS.

A LECTURE on "Ecclesiastical Architecture in Spain," illustrated by lantern slides, was given before this Society, by Mr. W. Randolph, at a general meeting on March 14, at Sheffield University. The lecturer drew attention to the need for considering not only permanent and material factors, such as soil and climate, but likewise those external and accidental elements of race and history which did so much to modify artistic expression, as, after the usual Roman settlement followed by a Christian Visigothic culture, there occurred a non-European invasion—the tidal wave, so to speak, of Arabic art and civilisation which, after its first flood, persisted long as an ebbing tide, or a mingling stream, simultaneously with the later flow of native and neighbouring currents, and was thus to some extent perpetuated during mediæval times. The Moorish influence as between the secure south and the struggling north impressed itself very strongly on the centre, in the one-time capital of Toledo, even giving birth to a mixed mediæval style called the Mudejar, Spain being at this period and until the close of it, a land of divided sovereignty with an unfixed capital. After this came the Romanesque, or as the Spaniards themselves term it, the Romanic or Byzantine Romanic, development of the northern regions, to be found in such places as Catalonia, Leon and Santiago, which were influenced by Northern Italy and by Southern France, already advanced in civilisation. In most parts of the country, too, there was a simple type of transitional and first Gothic in connection with which the widespread prestige and activity of the Cluniac and Cistercian monastic orders should be recollected, and presently, ready-made, appeared the genuine complete French Gothic, the latest Paris novelty, which in one field, artistic or social, seemed always to find a European following throughout the ages. A little group of cathedrals, Leon, Burgos and Toledo, best exemplified the movement.

In the fourteenth century, Catalonia, always individualistic, though much akin to its French neighbours of the south-east, claimed special notice, whilst in the course of the fifteenth century there emerged a more national type. It was hazardous, perhaps, to claim the cathedral of Seville, the great achievement of the age, as distinctively Spanish, but the close of this century produced the characteristic and luxuriant style that was best illustrated in the various foundations of Ferdinand and Isabella, known as the Catholic Kings.

Dealing with the climate, the speaker said that in the winter the whole northern plateau is extremely bleak, but the winter season is short, and it was the summer and the sunshine that counted in Spanish life and Spanish architecture; these had produced its enclosed courtyards and sombre church interiors, the relatively unpierced wall spaces, the flattened roofs and open eaves stories that characterised with some northern exceptions the country in general.

When the Christian reconquest began, most of the early Moorish mosques had perished, largely through their displacement by churches built on their sites, but the greatest of them all, the Mesquita of Cordoba, was fortunately spared, although it was converted, and this building remained one of the most extensive and extraordinary edifices in Europe. It formed a parallelogram, roughly 450 feet square, and was divided in every direction by arcaded colonnades sometimes in double tiers, and whichever way one looked one saw a forest of receding avenues in stone. In the midst of this forest the sixteenth century raised a cathedral choir of mixed style and mediocre size, which, of course, destroyed the original unity, while chapels had been fitted up all round the outer walls. Later Toledo afforded examples of both original and mediæval Moorish art in a small group of buildings, originally mosque or synagogue—for the Jews were powerful even in the mediæval city—afterwards converted to Christian purposes, and nowadays disused. The churches of Santa Maria la Blanca, with its artificial stone or stucco capitals, and Christo de la Lux were described by the lecturer, who drew attention to the fact that surface ornament moulded in gesso was a leading and often exquisite feature of Moorish art, and was carried over into the mixed and Mudejar style, and even translated into terms of pure Gothic tracery work, with interesting and sometimes excellent effect, and that structurally the semi-Moorish or Mauresque impressed itself in a marked manner on the lesser towers of the mediæval period, where it became almost a stereotyped form with two or three pointed horseshoe belfry openings and shallow panel work elsewhere; much of it was executed in brick, the Church of Santiago del Arrabal being a good example.

In the meantime the Romanesque had been developing elsewhere, and the early monastic churches and remains of Catalonia were very interesting in this respect, particularly Santiago de Compostella, with its splendid portal built in 1188. Street, in his classic book on Spain, showed it to belong to the family of St. Sernin at Toulouse.

The lecturer drew attention to the elder cathedral of Salamanca, with its striking lanterns suggestive of domes, built by a Bishop from Perigord, and to the cathedral at Avila, with its early Gothic ambulatory and picturesquely contrived outer aisle and shallow chapels sunk in the thickness of the outer wall, which itself formed a great semi-circle and was effectively worked into the city walls.

Tarragona Cathedral claimed attention as an example of the earliest complete Gothic; it was now stated to be on record that craftsmen were brought thither from Normandy in the early part of the twelfth century, but the actual church would seem to have a different parentage. It was simple, severe and massive, still almost transitional, compact and relatively small, with three main parallel apses, a central octagon lantern and a side tower. Within, the church displayed the characteristic ritual arrangement and equipment of the larger Spanish churches in which the enclosed Coro or choir, containing the stalls of clergy and choristers, was separated from the chancel by the width of the transept, which was shut off from both by high metal screens thrown open at service times, and sometimes connected by a railed passage way. Either the western or the eastern screen was flanked by twin pulpits used by the Epistoler and Gospeller respectively at a chanted Mass—thus recalling the ambos of early Italian usage. It would be seen, therefore, that the choir was thrown westward into the nave, as was partly the case in some English Benedictine churches, and entirely so at Westminster Abbey, which lacked, however, the transverse grilles, and that if this arrangement interfered with the vista from the west it at the same time afforded a full open view of the chancel from the transept.

By this time, however, the perfected Gothic of Northern France was ripe for transplantation, and the third decade of the 13th century saw the Sainted Ferdinand of Castille, contemporary of St. Louis of France, engaged in the founding of the two chief churches of the new architectural school, Burgos and Toledo. Burgos, originally designed as a comparatively small edifice, had been overpowered on plan by after additions and alterations, whilst the western spires, the central and eastern octagons, were all obviously of later work and recorded as being the work of one John of Cologne and his family successors. The chief beauty of the interior might well be found in the individual chapters and accretions with their contents of screens and altars and tombs and other fittings in which the Spanish churches generally were so rich.

Toledo, the Metropolitan See of Spain, was the crowning glory of a city wonderfully endowed by both art and nature. The Cathedral was a fully developed 13th century church of the Northern French type, cruciform, double aisled, ambulatoried and many chapelled—more coherent than Burgos, although not without additions. Among the internal features of note were the vault high reredos, sculptured and gilt and polychromed, the splendid gift of the noted Cardinal Ximenes, the beautiful alabaster enclosure of the choir and chancel, mainly 14th century, with its statuary and the rich stalls and other fittings of the Coro, besides the sumptuously panelled and frescoed Chapter room.

With regard to Barcelona, the capital of Catalonia, the French influence was of the south rather than the north, while the local type was Catalonian and not simply Spanish, a distinction jealously preserved even in language to the present day. Racial affinity with the south-western provinces of France was unquestionable, and in the Middle Ages Narbonne and Perpignan were, in fact, politically united to Spain.

The ancient churches of the capital formed a most interesting group, mainly or largely of 14th century work or design; they displayed a great openness of plan and structure, with arcades both wide and lofty, involving the reduction and almost the suppression of triforium and clerestory. In the case of the Cathedral, for example, the body of the church was unlit from the aisles and was excessively dark. The church of Santa Maria del Mar was also described.

The lecturer dealt next with the Cathedral of Palma, in Majorca, whose nave, he said, for size was one of the finest in Europe. It was roughly some 60 ft. wide, 10 ft. more than York, with aisles and side chapels, by some 250 ft. long, whilst the height approached 150 ft., a middle term between Amiens and Beauvais, but the interior appearance had been spoilt by an eccentric modern architect who had removed the Coro and its appurtenances bodily eastward, and so left the nave a bare and empty avenue. Another Catalonian cathedral mentioned was that of Genora, which was reputed to have the widest one-span mediæval nave in existence. This was, however, the climax of the type prominent in the southern provinces of France, Languedoc and Provence.

The speaker then mentioned the one outstanding Gothic monument of Andalusia, namely, the Cathedral of Seville, which, he said, any age or land might boast of. Standing on the site of a great Mosque which, converted into a church, served as a cathedral until the 15th century, just as Cordoba did yet; its plan was probably influenced by the Moorish lay-out taking the shape of a great quadrilateral, five aisled and side chapelled, some two-thirds as broad as long and having no apse to the main body. The external masses were dominated by the Moorish Renaissance Giralda Tower. The interior was of Gothic design, though strikingly individual in treatment.

The lecturer concluded by describing the church of San Juan de los Reges, and the Cartuja, or Charterhouse Monastery, near the City of Burgos, saying that there intervened between the free and fertile art he had described and the formalised Renaissance of Charles V. and of the Escorial, the phase known as the "Plateresque" from a supposed likeness to silver-smithery, and, in fact, the rich and semi-Gothic detail was often most delicate and fanciful, as a single example from Toledo in the hospital church of St. Cross would serve to show. This phase was indeed the last warm sunset gleam of an original and romantic national art.

A vote of thanks to the lecturer was proposed by Mr. J. R. Wigfull and seconded by Mr. A. M. Lusby.

BYZANTINE ARCHITECTURE

A lecture on this subject was delivered recently at the Bedford College for Women, N.W., under the chairmanship of the Rt. Hon. Sir Maurice de Bunsen, C.B. The lecturer was Mr. A. E. Henderson, F.S.A., F.R.I.B.A., and he demonstrated his subject by a large number of lantern slides.

After having been briefly introduced by the Chairman, Mr. Henderson said that architecture and anatomy were very similar; architecture must have its bones and its flesh. Egyptian architecture they all knew something about; he was not, therefore, going to say anything about that style, except to say that religion played a very prominent part in historical architecture. Religion was very conservative, and by that means the buildings had been preserved. By the time of Christ, arches, vaults and domes were all built in brickwork. The Romans, who at that time had command of the whole civilised world, liked convenient planning, and so they used brick, utilising marble work, mosaic and plasterwork for the fashionable exterior. So by the time of the Romans there was magnificent brickwork clothed with magnificent details. Christianity began in a small way in the East, but later on it increased, when Constantine the Great became Emperor, in the years 328-330. He took charge of the Church in the same way as Henry VIII took charge of the English Church. It was a curious thing that the ruler of the Church throughout all that time had been the sovereign.

The Church of St. Mary in Constantinople was a fine example of Byzantine architecture. This church had five altars, and in plan it was a square with a semi-circular apse loftily built, and it was very large. Columns of jasper in many colours supported the roof, both the walls and the flooring being covered with slabs of jasper. The central nave was enclosed by three aisles (one being the narthex), and a single ceiling covered both nave and aisles, the same very richly wrought in mosaic work. In the corner of the church, to the left, was to be seen a great tombstone of red jasper, in which was buried the Emperor Romanus. Further in the church was to be seen another tombstone in jasper, which was that of another Emperor.

The greatest church in Constantinople was Sancta Sophia, built by Justinian, of which Professor Lethaby had written: "It is the most interesting building on the world's surface." The main entrance to the church was under an archway which rose above the doorway, supported on four columns; it was like a little chapel, very richly and beautifully wrought. Beyond this came the great doorway of the church, the door very broad and high, and sheathed in bronze. Next came a closed passage (the outer narthex), in which, high up, was a gallery, and beyond this, again, another doorway, the door covered with bronze like the first one. That led into the inner narthex, which was high and broad, and its ceiling of wooden beams. On the left hand of the inner narthex opens a broad aisle, very beautifully constructed, its walls faced with many slabs of marble and jasper of divers colours; and there was a like aisle from the right side of the narthex; both these aisles being under the same ceiling of the hall. From the inner narthex the great nave of the church might be entered through five great and high doorways, each door being covered with bronze plates; but the central doorway was the highest and was the chief gate of entrance. The nave of the church was square-shaped with an apse, the most spacious and the loftiest, and the most beautifully and richly wrought in the world. The nave occupied the centre of the building, being bounded on three sides by the two apses and the hall of the inner narthex, all very high and broad, there being passage-ways between all three of them and into the nave. Further, the two aisles and the hall of the inner narthex had upper galleries which overlooked the central nave. All the three upper galleries led one into the other, their floorings being supported on columns of marble and green jasper, their ceilings visible, looking from the nave. But the mighty dome that roofed the nave was far more lofty than the ceilings of the side aisles. It was circular in form, and so lofty that a man had to have good eyes who would examine it from below. The nave covered by the dome measured 105 paces in the length and 93 in the width, and the dome above was supported on four huge pilasters, which were encased in slabs of jasper of many colours.

Justinian, said the lecturer, also carried out a great deal of building at Ravenna, in Italy. The church of San Vittali there was again square in plan. It was an octagon on the outside, and an octagon on the inside, except for the apse and the sanctuary, which is a barrel vault, all the rest of the seven sides being straight, but the carvings are much more beautiful. Unfortunately, the Renaissance came along, and as they did not care for the crudities of the Byzantine style, they painted a vast amount of ornament round, so that the dignity of the earlier work had been greatly lost.

Mr. Henderson concluded his lecture by showing slides of numerous other churches and buildings and explaining their details, notably those of the churches of St. Irene and St. Saviour's-in-the-Fields, Constantinople, and St. Mark's Venice.

THE CRAFT OF THE LETTERER

A lecture on this subject was given before the Incorporated Institute of British Decorators by Mr. H. Warren Wilson, A.R.C.A., Lecturer in Decoration at University College. In opening his paper, the lecturer said that possibly no motif provided so interesting, so beautiful and so dignified a surface texture as lettering in its various forms. Legend had been busy over the identity of the first writers. Chinese tradition gave as the inventor of writing the dragon-faced, four-eyed sage, T'sang Chien, who took as the models on which he formed the written characters, the stars of heaven, the footprints of birds and the markings on the back of the tortoise. Another legend, a Hindu one, said that the handwriting of Brahma (the supreme God of the Indian trinity) might be seen in the sutures of men's skulls.

Lettering, over and above its practical use, had, as he had said, a fine decorative value of its own, which would be seen in the writing of whichever race one studied. Egyptian hieroglyphic, Assyrian cuneiform imprint, Greek or Roman chiselling, Gothic penmanship, all alike were pleasant to see, quite apart from any meaning they might express. On painted mummy cases from Egypt, on ivories from Byzantium, on coins from Greece and Syracuse, on Persian tiles and lustred pottery, on Gothic glass and tapestry, bookbinding and goldsmiths' and silversmiths' work, lettering in some form (sometimes a very emphatic one), played a part.

Our alphabet (the Latin alphabet) was the most important of all alphabets. The ultimate dominance of the Latins meant a lasting supremacy to the alphabet of the Roman Empire. It became the vehicle of Greek and Roman culture to the West of Europe. It was the vehicle of the culture of the progressive races of the world. In its first form it was an alphabet of capital letters, majuscules they were called. The small letters which came later were called minuscules. These majuscules, at their finest, were exceedingly beautiful. Their monumental simplicity, together with their incomparable clearness and individuality, gave them a permanent value. Their fine forms were evolved by the use of the chisel, probably under the influence of writing, and had reached full development about 2,000 years ago. One of the finest examples of this which had ever been executed was the inscription on the base of the Trajan Column. They were extraordinarily fine in form and full of character.

There were two kinds of written majuscules. The first were written copies of the inscription letters as executed in the time of Augustus and successive Emperors. The second form of majuscle (employed as a literary hand) was that to which the name "uncial" was given. The name uncial was a reference to the Latin measurement of one inch, which was the height of the letters at the time this name was given. As the square capital writing (of which the uncial was the modification) was the easiest form to carve on stone, so it was more simple when writing letters with reed or pen to avoid corners and substitute curves. The uncial hand, then, was essentially a round hand, and its principal characteristics were curved forms. The uniform height of the letters was broken by the extension of some above or below the lines. The adoption of certain letters projecting above or below the writing line, might be said to mark the origin of the small alphabet. The introduction of the "half uncials" of the sixth, seventh and eighth centuries constituted a further intermediary stage of progress. This half uncial hand (the Cursive hand—a modification of the uncial) recommended itself doubtless from the greater ease with which it could be written. It was quickly adopted as a book hand.

The period of Charlemagne, Charles the Great, marked an epoch in the history of handwriting in Western Europe. With the revival of learning came naturally a reform of writing. A Decree of Charlemagne of the year 789 called for a revision and re-writing of Church books. This work naturally brought with it great activity in the writing schools of the chief monastic centres of France. In none was there greater activity than at Tours, where under the rule of Alcuin of York (who was Abbot of St. Martin's from 796-864) was developed that exact and beautiful hand which has received the name Caroline miniscule. The new style was notable for its clearness, regularity and simplicity. A noticeable characteristic was that the tops of tall letters were thickened or clubbed. Of this type the letters in our modern copy books, the print in our newspapers, might be regarded as the direct, though degenerate, descendants.

The early Italian printers copied in their types these round clear letters, and thus the fifteenth century Italian formal writing became the foundation of the Roman small letters, which had superseded all others for the printing of books.

Regarding the materials which had been used for the purpose of writing and lettering, the lecturer said that among the materials used within memory of man for the purpose of receiving writing (omitting those used for incised lettering) were three, which by reason of greater abundance and convenience had, each in turn, displaced all others, viz., papyrus, vellum, and paper. In the Delta of the Nile was widely cultivated the papyrus plant, from which was prepared the great writing material of the ancient world. It was used extensively in Italy, Greece Egypt and Syria. The durability of the skins of animals used as garments then turned the attention of the peoples of the ancient nations of the world to its suitability for a writing surface, and they appropriated it to this use. It was used undoubtedly by Egyptians in the Fourth Dynasty. In the British Museum was a writing on white leather dated 2,000 B.C. Leather was also used in this way by the Phoenicians, Persians and Greeks. Vellum, which was skin prepared so that both sides might be used, was really

not an invention, but an improvement upon old practice.

The third of the three great writing materials, paper, appeared to have been used by the Chinese from very early times. Its introduction into Europe was assigned to the agency of Arabs, who are believed to have first learnt its use at Samarkand (which they captured A.D. 704).

Of inks, various kinds had been used. The ancients used the black ink made from the liquid of the cuttle fish. In the Middle Ages vitriol was an ordinary ingredient. Theophilus (the twelfth century writer), in his "De Diversis Artibus," gave a recipe for the manufacture of ink from thornwood boiled down and mixed with wine and vitriol.

Of the developments of lettering in modern times, he supposed, said the lecturer, that at no time had been produced lettering of a worse type than during the nineteenth century. Since that time there had been a very considerable improvement, but the tendency to-day was in the direction of a certain slavish insistence on the use of a more or less pure form of the Roman Capital, or else a form of the "I am ugly but you can't miss me" type. While it was possibly true that the fine Roman Capital was the most beautiful and most legible letter ever evolved, it was equally true that it was not the type of letter to use for any and every purpose—and for the ugly letter there was, of course, no possible excuse.

He felt, said the lecturer, that the best lettering for to-day was likely to come from the craftsman who, while having a sound knowledge of the traditional letter forms, and of the history of the art, was yet courageous enough and willing to follow the promptings of his own instinct and to trust himself. Only so, he thought, should we have lettering worthy of the best of our age.

BEAUTY IN ARCHITECTURE

At the Annual Conference for Teachers of Handicraft and Practical Education, held at Cardiff from March 28 to April 3, under the auspices of the Institute of Handicraft Teachers, the first address was given in the Assembly Hall of the Technical College by Mr. W. S. Purchon, M.A., A.R.I.B.A., Head of the Welsh School of Architecture.

The lecturer took as his subject "Beauty in Architecture," and, with the help of a series of illustrations of the leading buildings of many periods and countries, he explained some of the main points in the grammar of architecture and some of the methods of "constructing its poetry." He showed how the untrained designer loses unity by the introduction of too many varieties of form, by lack of clear domination, and by indecision in treatment. He dealt with architectural composition both in its main masses and its subdivisions, discussed the claims of symmetrical and "picturesque" arrangements, and, while emphasising the value of tradition, indicated the fallacy of thoughtless attempts to reproduce old work. He explained the importance of the expression of function and of purpose and made it clear that successful design is not necessarily a matter of expense, but that the skilled designer can produce a better result from given conditions than can an untrained man. He indicated that the young designer should constantly bear in mind one secret of Greek success in design—the elimination of the non-essential.

In conclusion the lecturer drew attention to two great present-day needs—a closer and more sympathetic co-operation of craftsman and designer and an understanding public. "To get the latter," he said, "not only do we need schools of architecture and of the great arts, but we must reflect in all our general schemes of education the great importance of the arts. The bringing of beauty to a world which needs so much must be looked upon as having at least as much importance as more material matters."

THE LEADWORKER'S CRAFT

The last of the series of six lectures on the building crafts, under the heading of "Leadwork," was delivered by Mr. W. H. Ansell, M.C., F.R.I.B.A. (President of the Architectural Association), at the Polytechnic, Chiswick, W.4.

The lecturer said that the theme of his lecture might also be stated, "how a material often despised by man, was capable of expressing genuine artistic feelings, when treated rightly." In these latter days lead had been so despised. Its function in the average building was an important one, certainly, but a strictly utilitarian one. We saw it principally in the form of more or less unpleasant pipes, which had an awkward habit of becoming visible where the architect never dreamed there was any possibility of their appearance. The advent of the leadworker, or the plumber, as we called him from his French name, in our home was usually associated with domestic catastrophes in the water pipes. He was never so important as the mason, or the carpenter, though his work was absolutely necessary for the completion of any building.

In mediæval England, lead must have been used lavishly, from the delight that was taken in the forms that could be fashioned in it, as well as from more utilitarian motives. The mediæval builder used lead for the covering of his roofs, but he also used it for his fonts, which he decorated with arcades and figure subjects. His gutters and down-pipes were necessary factors to bring the water down from the roofs, but he was not content with a mere efficiency in the carriage of water. He made of these common things works of art, of delight, and beauty. The downpipe was of comparatively late introduction in the Middle Ages. In many buildings the spouting gargoyles ejected the water from the gutters.

When people began to concern themselves with the art of leadworking, as distinct from its sanitary and scientific side, it was to the practising plumbers that they turned to find out if any remains of the old tradition still existed. It was found that there was practically none remaining, and that the study of the old examples, and of written records, must be relied upon for any desired knowledge of past methods. The finest examples of mediæval leadwork were to be found in France; the best in England was perhaps as late as the Tudor period, if the early fonts were excepted. Now it was a truism that could not be too often emphasised that the properties and limitations of a material should greatly influence the method of working it, and the forms that were produced in it, and that one material should not be tortured into forms that properly belonged to others. This principle was at the very basis of good craftsmanship. What, then, were the properties of lead? It was easy to cast, and to work, owing to its softness, its ductibility, and its low melting point; it was extremely durable under normal conditions; it was heavy for its bulk. But it was very susceptible to changes in temperature; between the coldest day of winter and the greatest heat of the summer sun were many degrees difference, and lead, more than any other metal used in building, shrank with the cold, and swelled with the heat. Consequently, for roofs, it must be so used and fixed that it was free to do all this, without ill-effects, that when shrinkage occurred there must not be cracks, and when expansions, that there must be no wrenching from support. And when used for more decorative purposes than roofing, the limitations must still be kept in view. Still confining our attention to the material, there was one great difference between the lead of mediæval times and that which was the commercial product of to-day. The actual metal in the "pig," as it was called—the first shape the lead took when separated from the ore—was the same. Pure lead was pure lead all the world over. But the basis of most leadwork was the sheet, and it was in the transformation of the pig-lead into sheets that the difference lay. The old lead was "cast"; modern lead was rolled or milled, by machinery. The first milled lead was made about 1670, and was much talked about.

In considering some of the legitimate methods of treating lead decoratively, of putting some humanity and pleasure into the use of it, the lecturer said that the chief of these were casting to shapes; beating up or embossing; piercing to various patterns; tinning and enamelling; painting or gilding. Cast ornaments were made by pressing moulds into the sand bed of the casting-frame before the lead was poured over it. Then the shape, so impressed, was left on the lead sheet. Some of the cast patterns were very elaborate, particularly the strapwork cisterns of the seventeenth and eighteenth centuries. Many interesting patterns were to be seen on these. A cable moulding was a common form of decoration for edges, and was sometimes cast by pressing a piece of coarse string or rope into the sand. Embossing was a form of repoussé decoration, the lead being beaten at the back with rounded hammers, and punched, so as to produce modelled forms on the front. It was in this work that individual skill had full play. A skilful leadbeater would so work that the lead was not thinner where it was bossed out, but was the same thickness throughout.

Tinning was a very effective form of decorating lead. This was done by covering the lead with a coating of lampblack and size, on which the pattern was then drawn or traced. With a steel tool the black from the surface to be tinned was removed or scraped off until it was bright and shining. The surface was then oiled, and the tin melted with an ordinary soldering iron or bit. The tin adhered to the lead, and when the black was cleaned off the pattern was emphasised on the grey lead with the shining tin, which was practically indestructible. In olden days the tinned parts were sometimes gilded, or covered with transparent colours. Viollet-le-Duc, said the lecturer, had written that the plumbers' art of the Middle Ages was wrought out like colossal goldsmiths' art.

An interesting use of lead was for the making of fonts, and Sir Lawrence Weaver had collected data of all the remaining English examples, which numbered some 28 or 30. They were mostly of the twelfth or thirteenth century, small and round, like cylindrical bowls. The ornament on them was cast and modelled, and Romanesque influence was clearly shown. The font at Walton-on-the-Hill, Surrey, had a rounded arcade with twisted columns, and seated figures under the arches. That at Brookland, Kent, had two arcades, one above the other, the top having the signs of the Zodiac; the lower, men and women engaged in various operations, vine-pruning, making hay, and so on.

In later years the plumbers' craft was exercised with the making of cisterns, of which some beautiful examples might be seen in the new water garden that had been formed in front of Wren's Orangery, in Kensington Gardens. Every house of any size must have had those lead cisterns in the seventeenth and eighteenth centuries. We relegated our galvanised iron cistern to a more or less inaccessible position in the roof, and the less we had to visit it the better we liked it. But the Renaissance plumbers made of these common objects things of real beauty.

Garden architecture seemed peculiarly fitted for the beauties of lead. Its white oxidation harmonised well with turf or bush of flowers, and in the formal garden it made a charming point of interest. It was fashioned into vases and figures. At Hampton Court were two lead vases with very beautiful handles, having female figures with folded arms, which were perfectly delightful, evidently the work of a genuine sculptor, and yet eminently fitting for the material in which they were wrought. Vases and figures on gate-piers were also frequently of lead.

INSTITUTE OF BUILDERS

ANNUAL DINNER.

The annual dinner of the Institute of Builders was held in the Hall of the Carpenters' Company on Tuesday evening last. Mr. H. T. Holloway (president of the Institute) was in the chair, and among others present were Sir Gilbert Scott, R.A.; Sir William Mackenzie; Sir Alfred Gelder; Sir J. Walker Smith; Sir Walter Lawrence (past-president); Sir George Humphreys; Lt.-Gen. Sir William Furse, K.B.E.; Councillor William Hall (president, National Federation of Building Trades' Employers); Mr. Walter Tapper, A.R.A., P.R.I.B.A.; Major R. I. Tasker, M.P. (president, the Incorporated Association of Architects and Surveyors); Mr. Walter Jacob (Master of the Worshipful Company of Carpenters); Mr. Martin S. Briggs; Mr. Stanley Hamp, F.R.I.B.A.; Mr. Sydney Tatchell; Mr. F. M. May; Mr. A. B. Falkner; Mr. Humphrey Dean; Mr. E. H. Runnacles; Mr. W. W. Lawrence; Mr. R. L. Roberts; Major R. J. Holliday (past-president of the Institute); Mr. S. Guy Sapcote (past-president); Mr. A. H. Adamson (vice-president); Mr. T. L. Adamson; Mr. G. Widdowson; Dr. R. E. Stradling, M.C. (Director of Building Research Department of Scientific and Industrial Research); Professor C. H. Reilly; Major Maxwell Ayrton; Mr. T. P. Bennett; Mr. Winton Newman; Mr. P. J. Westwood; Mr. Victor Wilkins; Mr. J. H. Barns; Mr. Lionel U. Grace; Major A. D. S. Rice; Mr. F. W. Troup; Mr. J. Croad; Mr. Maurice Chesterton; Mr. R. E. Holloway; Mr. F. D. Huntington; Mr. W. Begg Simpson; Mr. A. G. White (secretary of the National Federation of Building Trades' Employers); Mr. P. J. Spencer, M.A. (secretary of the Institute), and many others.

The usual loyal toasts having been honoured,

The toast of the "Institute of Builders" was proposed by Professor C. H. Reilly, who said that the Institute had been founded in 1834; that was the year that the Royal Institute of British Architects was founded. Possibly the two institutions had been born in the same month, day, hour—they were twins! It was a function of twins that each one felt uncomfortable if the other one was uncomfortable and when the Institute of Builders had difficulties the R.I.B.A. had difficulties also. The Institute of Builders had done something that he thought wise in shedding from itself all the more troublesome and contentious side of the building business This had been passed over to the Federation of Master Builders, and the Institute thus left free to devote itself to education and the finer arts. As twins, neither architect nor builder could get on without the other. The builder's work did not show to advantage in a badly designed building, and the architect's designs were no good unless properly carried out. Having chosen its path, the Institute had rightly turned its attention to education. At the Research Station near Watford, the Government paid for the research, but the record of that research would be buried in the archives at Whitehall were it not for the fact that the Institute paid for the publication of a monthly abstract of those results, and circulated this throughout the country. This was the right university spirit, and should be at the back of every teaching institution. Beyond this the Institute had founded Research Scholarships, so that architects and builders might stay at the Research Station and carry away into their work afterwards some of the things they had seen there Some members of the Institute had helped the various schools of architecture in this country. France had had schools of architecture for 250 years, America had had them 60 years; we had only had them 30 years. He would suggest that side by side with each school of architecture, and of equal status with it, as a twin should be, there should be a great school of building. Friendships would then be formed between students working together that would give the confidence necessary if good joint work was to be done between the members of the two professions. The only jobs he had ever enjoyed were those where he had found the builder helping him all the way through. We were entering on an era of scientific thought on all hands, and he begged his audience, as he did his architectural friends, not to be afraid of scientific things. The only way to make the buildings of our present era thoroughly satisfactory from every point of view, would be by scientifically answering all the problems that stood before architect and builder.

The President, responding to the toast, said there had been, in the past, some confusion of mind not only among those outside the ranks of master builders, but also here and there among builders themselves, as to the function and aim of the Institute. The Institute had nothing to do with industrial questions in the sense that it had no connection with the trade federations, which dealt more particularly with such matters as wages and conditions agreements, trade disputes, and questions of that sort. Broadly stated, the object of the Institute was to maintain and develop standards of building conduct and practice, and so to raise the status of the industry and of all who followed the calling of master builders. Its business was to advance the professional interests of building. There were, of course, certain subjects in which industrial and trade as well as professional interests were involved. One might instance Agreed Conditions of Contract as a case in point. The professional aspect of building contracts was eminently a matter of concern to the Institute, and in matters of that kind it took a full advisory share. Throughout the contract negotiations, lasting for about seven or eight years, the Institute representatives had endeavoured to uphold the professional status of the builder and to arrange terms sound in principle and equitable to all parties. It was a matter of the greatest regret that after all these years of close and friendly negotiations in committee culminating in complete agreement, the work of that committee had yet to be implemented. What would be the next step it was for someone else to say; but the Institute of Builders fully endorsed the work of the committee, and was not agreeable to the valuable labour of several years being thrown aside as if it had never been undertaken. It became more apparent every year that in the advancement of building as a profession, education must be the main instrument and, therefore, education was the greatest pre-occupation of the Institute. Constructional methods and management were becoming more intricate and more scientific: great changes were taking place; where formerly rule of thumb methods had sufficed, building work now required a far higher standard of knowledge and organisation, and a more exact scientific training for all engaged in the higher ranks of the industry. During the past year the Institute had made substantial progress towards its aims. Last year his predecessor, Mr. Sapcote, had been able to announce that the Institute had established close relations with the Building Research Station at Watford, where work of the greatest value was being done. Mr. Sapcote had then stated that the Institute had contributed £200 per annum towards the publication of Building Science Abstracts. This year the Institute had drawn up, in conjunction with Dr. Stradling, a scheme which provided two two-year fellowships of £150 a year each, available for approved students. The course of study outlined would be of the highest possible value to the students themselves and of lasting benefit to the industry. Another important side of the Institute's educational policy was the holding of Licentiate and Associate membership examinations. Last year there had been an increase in the number of candidates, but the poor quality of Licentiate examination work and the small proportion of passes were disappointing. The Institute each year was made to feel in this matter the complete justification of its efforts towards those better building education facilities which should result in better building economy. The Associates had done better work in what was admittedly a comprehensive test of a high order. The time and work spent by candidates in preparing for these examinations would be of enduring advantage to them in their future life and work. During the year valuable progress had been made in the matter of National Building Certificates, from which important results might be anticipated in the very near future. The institution of such Certificates would have a stimulating and far-reaching effect on building education in broadening courses of study and in developing their level to standards which to-day were very rarely obtained. The steps outlined inevitably led to the keystone of the Institute's present educational policy, which was the foundation of University courses in Building Science. Each step taken showed the need there was of a higher standard of education: nothing short of a University course would suffice. The whole subject had been re-examined, and unofficial conferences held with leading university authorities. Further conversations and inquiries were about to take place, and events were now in train which should soon lead to some definite step being taken. The Institute, in its efforts to found a School of Building Science knew that the cordial co-operation of the Royal Institute of British Architects and of architects generally could be relied upon. The standard of architectural education was advancing. Work such as was being done by Professor Reilly at Liverpool, by the Royal Institute, at the Architectural Association Schools and at Cambridge was all towards higher standards in design. But it was not enough that architects should be able to design on paper a beautiful structure. There was a need for knowledge in sound construction and building science, and when the Institute established an advanced course in Building Science, it would provide a school where the student architect, in association with the student builder, might get a good knowledge of construction—a solid foundation on which to build his design.

Mr. G. Mowlem Burt proposed the health of the guests. Among these, he said, was Lieut.-Gen. Sir William Furse, K.C.B., who had done great service in the cause of furthering the employment of Empire timbers. The Institute appreciated this opportunity of calling attention to work which should be better known. It should be realised that we need not, for instance, go to Italy if we wanted the material for a finely panelled room; there were plenty of Empire timbers that would give a result as good as that obtained with any other wood. He welcomed also the presence of Sir George Humphreys (Chairman of the Building Research Board) and of Dr. R. E. Stradling, Director of Building Research. It was the privilege of himself (Mr. Burt) and of their President to be associated with the work done at Watford—work that had been sadly neglected in the past, and was now every day proving of increasing importance. There was also present Mr. Walter Tapper (President of the Royal Institute of British Architects) and many other architects. There were also surveyors. Professor Reilly had referred to architecture and building as being twins, but he (the speaker) preferred to include surveying, and regard the three professions as triplets. They had been told that good workmanship could not make up for bad design, nor good design for bad workmanship; he would add that good design, plus good workmanship, could not make up for bad measurement.

Mr. Justice Eve responded in a humorous speech.

Lieut.-Gen. Sir Wm. Furse, in the course of his reply, said that the Timber Committee that had been mentioned was doing excellent work for the Empire.

THE SURVEYORS' INSTITUTION

Education of the Young Surveyor.

At a meeting of the Surveyors' Institution held on Monday last, Mr. B. W. Adkin, F.S.I. (Principal of the College of Estate Management), in the course of a paper on this subject, said without doubt the young surveyor of to-day required a more thorough education than was necessary for his predecessors, and the lecturer was convinced that the experience to be gained by him while serving his articles in an office was seldom enough. Much of the work done in an office was of a technical character with which only a principal, or possibly a chief assistant, could deal. Great responsibility was involved in such work, and therefore it could not rightly be entrusted to a pupil or junior assistant. The pupil might see the result of his principal's work, he might even be employed to some extent in the doing of it, but as a rule he gained no idea of the knowledge that lay behind the work. It was this technical knowledge, so difficult for the pupil to gain from his office experience, that was required for the examinations and which it was the purpose of the examinations to encourage the student to acquire by reading and study in his spare time.

It had seemed to the lecturer that the opportunities for acquiring professional knowledge in an office were not so good as they used to be. Drawings that used to be duplicated by tracing were now prepared by a trade process; printed forms had taken the place of hand-written tenancy agreements. Everything had been speeded up and departmentalised, and the principal had less time to give to his pupils.

In the lecturer's opinion it was increasingly evident that if a young surveyor desired to make progress in his profession he was largely dependent upon what he could learn of the theory and the technical side of his profession in his spare time. There was much more for him to learn, and there was less opportunity for him to learn it in an office. The professional examinations supplied the necessary incentive to individual study. A wide knowledge of the theory of the profession was essential to enable a student to pass these examinations; this knowledge could not be obtained from office experience alone. Many a young man had told him that he had learned more about his profession in three months' tuition than in the whole of his three years of articles. Many who had started in practice on their own account had discovered that the work they did in preparation for their examinations, though they deemed it at the time to be superfluous, had in fact given them a knowledge which was useful to them in practice every day of their lives.

Referring to existing deficiencies in education, the lecturer said there would seem to be no doubt that the remedy for the deficiencies, as shown by the examiners' reports, lay in a reorganised examination, whereby all candidates might be compelled, on penalty of failure at their examinations, to show proof of sufficient scholastic knowledge, of a grasp of basic principles and fundamental subjects, of a proficiency in draughtsmanship, and of an adequate acquaintance with mathematics as applied to professional subjects. It was also most desirable that every young surveyor should be able to use and develop the knowledge he has acquired at school, to apply it to his work, and to maintain his habit of study by proceeding with his professional studies immediately after leaving school.

As already announced, the Council had decided to adopt certain recommendations of their Education Committee for the reorganisation of the professional examinations. These recommendations were designed to insure that the future member of the Institution should obtain a sound training in the basic principles of his profession, and that his course of training should develop gradually from general scholastic knowledge to the more technical subjects. The danger of superficial cramming was recognised. By means of the new system of examinations the future surveyor would be able to continue his studies without a break on leaving school, and, if he desired to do so, to take the more elementary part of the Intermediate Examination before attaining the age of nineteen. It had been decided that the reorganised system of examination should come into force in 1932.

This decision appeared to supply the necessary remedy for the present unsatisfactory position, and a perusal of the proposed system of examination gave equal grounds for satisfaction. Every young surveyor, after passing a preliminary examination in scholastic subjects, would be obliged to learn to draw well, to show a proficiency in such mathematics as were required for book-keeping, mensuration and trigonometry as applied to land surveying. He would be compelled to know and learn how to use the various instruments employed in surveying, and to know how to make surveys of land and buildings. He would be taught to think as to the reason of things by studying the elements of economics, and would be obliged to obtain a knowledge of central and local government, which would form a suitable foundation for some of the professional subjects. All this he could do if he liked before he was nineteen, and he could by then have made himself a useful assistant.

Whether he took the more elementary part of the Intermediate Examination before the age of nineteen, or whether he took the whole examination after that age, he would be obliged to learn all the fundamental subjects of his profession before he reached the advanced subjects of the Final Examination as now arranged, and by means of this gradual progress should be able to benefit to the fullest possible extent from his education.

In short, the reorganised system of examination would appear to be a great improvement upon the present system, excellent though it was. The reorganised system would induce a more thorough education and a greater certainty of continuity of study, while it should also prove of increased value in weeding out unsuitable candidates and in selecting the best for membership of the Institution. The alterations made in the subjects of examination had been effected without sacrificing those valuable subjects which had been incorporated in the syllabus from the commencement of the examination system, but certain fundamental subjects had been added which should supply that grasp of basic principles which in some cases had been lacking among the candidates of the past.

At the present time a young man intending to become a surveyor was not bound to take articles; he might accept forthwith a position as paid clerk or assistant if he could secure an appointment. The examinations were open to him in either case, and his progress in the profession was not seriously affected by his choice. In the solicitor's profession articles were compulsory before anyone was permitted to practise, and the clerks were a separate body; but there was nothing to prevent articles being given to a clerk who had shown conspicuous ability. This practice had been followed in the offices of some surveyors. The question as to whether articles should be compulsory for admission to membership of the Institution was debatable. He had met surveyors who preferred to take assistants rather than articled pupils.

Many years in the profession were essential to the acquisition of practical experience, and if the Intermediate and Final Examinations were to be regarded as a test thereof, the only feasible method would be to delay these examinations until a student had arrived at the age of at least twenty-five years. To delay the examinations until a student had acquired good practical experience would, in the lecturer's opinion, be a fatal mistake. The habit of study acquired at school would be lost. Many of those who were busily engaged in practice would find no time or inclination for study and would not take the examinations. Many would have become so immersed in some specialised line of the profession that they would be no longer able to absorb the general knowledge which the examinations required and would fail to pass. These views were not mere arguments, but were derived from his own experience.

The time taken for preparation for examinations by candidates was often too short. In the case of those who were engaged in offices during the day time he considered that twelve months was the minimum time which should be devoted to preparation for either the Intermediate or Final Examination, and that eighteen months or two years was preferable. Preparation for a period of six or nine months was suitable only for those who had sat unsuccessfully before, or for some reason had already covered the ground.

BARTLETT SCHOOL OF ARCHITECTURE

We have received a copy of a brochure relating to the work of the Bartlett School of Architecture, University of London, which, besides setting forth all information relative to the courses of study, scholarships, prizes, etc., includes a number of illustrations of the work of students of the School. It is pointed out that University College, owing to its central position and its numerous departments comprised in the Faculties of Arts and Science, offers special facilities for a comprehensive course of training in architecture. Full advantage is taken of the proximity of the Departments of Engineering and Archæology, while drawing from the life and modelling are taught in the Slade School of Fine Art. Insight into the various aspects of building work can thus be obtained under exceptional conditions.

We are asked to call special attention to the fact that two Entrance Exhibitions in the Bartlett School of Architecture of the value of £40 a year may be awarded in June, 1929. Candidates for the first Exhibition must have passed the Matriculation Examination of the University or some other examination accepted in its stead. The successful candidate will be required to take a full-time course leading to the University Degree in Architecture. The Exhibition is tenable, subject to satisfactory progress, for a period of five years. Candidates for the second Exhibition must be graduates of a British university or of some other approved university. Application forms may be obtained from the Secretary, University College, London (Gower-street, W.C.1). These must be returned to him not later than May 30.

INCORPORATED CHURCH BUILDING SOCIETY.

At a meeting of this Society held at 7, Queen Anne's Gate, Westminster, on March 21 (the Rev. A. G. Ingram in the chair), grants were made towards building new churches at:—Annfield Plain, S. Aidan, £150; Bexhill, East, £75; Bromley, S. Andrew, £250; Castleford, S. Michael, £150; Dinas Powis, S. Peter, £125; Llandudno Junction, Holy Trinity, £225; Sunderland, St. Mary Magdalene, £250; Tooting, S. Augustine, £250.

Towards rebuilding the church at:—Birmingham, St. Stephen, £200.

Towards enlarging or repairing the churches at:—Barking, S. Margaret, £150; Chester, S. Peter, £75; Hendred, West, Holy Trinity, £25; Houghton, S. Martin, £25; Llawhaden, S. Aeddan, £25; Pimlico, S. Barnabas, £20.

A grant of £150 was made towards Rhosddu, S. Margaret, from the Mission Buildings Fund.

The following grants were also paid for works completed at:—Batcombe, S. Mary the Virgin, £50; Cadishead, S. Mary, £300; Maiden Bradley, All Saints, £20; Milton, S. Mary Magdalene, £100; Odell, All Saints, £80; Sunderland, S. Barnabas, £50.

In addition to the above, the sum of £560 was paid towards the repairs of 27 churches from trust funds held by the society.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting!—Ed.

Basement.

[Reply to "Troubled," March 29.]

Sir,—There is no doubt that the asphalt rendering needed support both to walls and floor. The former should be rendered, and an additional 4½ in. wall built against the asphalt on the inside. The floor should be rendered, and a loading coat of concrete laid over the asphalt. With these precautions there should be no leakage, if the asphalt is properly executed.

Construction.

Book on Roofing.

[Reply to "Tiler," March 29.]

Sir,—I should recommend Rea's "How to Estimate" as giving the most complete information upon this and kindred subjects.

Complete.

Articles.

Sir,—What articles can an architect present to a pupil who has served six years on a verbal agreement? What happens in such a case if no articles can be presented?

C. R.

Building Line Question.

[Reply to "Constant Reader," April 5.]

Sir,—Under Section 155 of the Public Health Act, 1875, an urban authority has power to regulate the line of buildings where a building is taken down in order to be rebuilt in the same situation, paying compensation to the owner for any loss sustained consequent on the building being set back.

The Road Improvement Act does not give any similar power to a highway authority, but provision is made for the acquisition of land on either side of a proposed new road.

Then, under Section 33 of the Public Health Act, 1925, the local authority, in districts where this Section has been adopted, may prescribe an improvement line for widening streets; and any person whose property is injuriously affected thereby is entitled to obtain compensation from the local authority. No new building can then be placed nearer the centre of the street than the improved line, except with the consent of the local authority.

Improvements in streets may also be made under Sections 66 to 74 of the Towns Improvement Clauses Act, 1897, compensation being paid to the owner for any damages which may have accrued to him.

Another Reader.

Sir,—The question depends somewhat upon whether the local authority has adopted a town-planning scheme; but in any case, where there is a road-widening scheme, the pulling down of an existing building opens the opportunity for enforced setting back. In addition, the wooden buildings were no doubt licences for a limited period as "temporary buildings," and therefore do not appear to affect the case. It would appear that your correspondent will have to conform with the prescribed building line.

Reader.

Contract Question.

Sir,—During the execution of a contract, "A" fails and grants a trust deed in favour of "B." "B" in the usual way advertised this fact, stating that moneys due to the estate should be paid, and claims made on or before a certain date. "B," however, continued to employ men for two months on "A's" contract without giving notice to the client or architect whether or not he intended to complete the work. The client and architect took for granted that since "B" continued to work on the contract he intended to complete the work. "B" now asks the architect to issue a certificate for an instalment for work done and the architect refuses to grant same until "B" signs the contract to complete the work. In the case of "B" refusing to sign the contract to complete the work, the architect intends to take in an offer from another contractor and then issue a certificate in "B's" favour for the amount of the original contract, less the sum that it will take to complete the work. I shall be glad to know if this procedure is correct.

Scottish Architect.

Plastering External Walls.

[Reply to "Inquirer," April 5.]

Sir,—There is no reason why the finishing coat of external rendering should not be done in lime on a cement backing. It is just as well to make three-coat work of this, giving two coats of cement, which has to resist the weather, and one of lime. Lime will stick to cement, but cement on lime will, of course, blow to bits.

Rendering.

Hygienic Rock.

Sir,—I propose to construct the external walls of a house with an outer 4½ in. of brickwork, an inner thickness of 3 in. breeze-blocks, with a space of 1 in. filled in with hygienic rock. Can you tell me whether this is sound construction, and whether this is likely to add materially to the cost?

Builder.

Enamel.

Sir,—On work that has received three coats of oils, in good condition but of long standing, is it necessary to add another undercoat to give a satisfactory enamel finish?

Student.

THE WEEK IN PARLIAMENT

Cables on the Downs.

Sir Charles Trevelyan asked the Minister of Transport whether his attention had been drawn to an application which had been made for compulsory powers to place an overhead high-tension electric cable across some land on the top of the Downs at Whipsnade, near Dunstable, which had been given to the National Trust as a place from which extensive views both to the north and south could be obtained; and would he give careful consideration to the proposal, and any possible alternative routes, before authorising a line across the property which must materially affect the purpose for which the land was given.

Colonel Ashley said he had received an application from the Corporation of Luton, under Section 22 of the Electricity (Supply) Act, 1919, for wayleaves in respect of an overhead line to which the County Council and the local authorities concerned had given their consent. He had ordered an inquiry to be held on April 8, at which the objections, of the National Trust and other owners of property, to wayleaves across their lands would be considered.

OBITUARY

At Monday's meeting of the R.I.B.A., the hon. secretary announced with deep regret the death of the following members:—

Robert Sidney Powell, elected Fellow 1918.

Frederick Ernest Williams, elected Associate 1891, Fellow 1924.

Arthur John Gale, elected Associate 1881, Fellow 1889, and transferred to list of Retired Fellows 1917.

George King Deakin, elected Licentiate 1910.

Richard George Beard, elected Licentiate 1911.

THE POWERS OF THE ARCHITECT—VII

By W. T. CRESWELL, Barrister-at-Law, Hon. A.R.I.B.A., Associate (late Fellow) of the Surveyors' Institution, etc.

Certificates.

We have seen that, as a rule, in any agreement between an architect and his employer, the powers of the architect are not defined but are inferred from the contract between the employer and the contractor.

It is rare for him to be given authority to dismiss a contractor, but most building contracts now give him the power of expressing or withholding his approval of the work by means of certificates. Any default on his part which prevents the performance of the contract by the contractor is generally considered to be a default on the part of the employer.

There are three classes of certificates:—(*a*) "interim" certificates—sanctioning payments on account; (*b*) "completion" certificates—sanctioning a payment on completion of the contract work; (*c*) "final" certificates—sanctioning payment of the balance on adjustment of accounts. It is always difficult to determine when the architect's position as an agent merges into that of a *quasi*-judge. As a mere agent his certificate cannot be regarded as a condition precedent to payment under any particular building contract which limits the authority of the architect so that his duty is only to protect the interests of the employer. He is a mere agent and can be sued for negligence if he fails in that duty. Whereas if in the building contract it is clearly intended that he owes a duty to the contractor as well as the employer, and is called upon to give judicial decisions, he becomes thereby a *quasi*-judge and cannot be sued for negligence by either party. In Chambers *v.* Goldthorpe (1901), 1 K.B. 624, the Master of the Rolls made this clear. He said: "If in making out the certificate the architect was acting merely as agent for the building owner, he would be liable if he should have acted negligently; but if he were then acting as *quasi*-arbitrator between the two parties, he would not be liable for negligence at the suit of the owner. . . . He was employed by the owner to look after the builder and to see that the builder made use of proper materials. In these matters the architect was acting as agent for the owner, his position was adviser to the builder. In those instances when his duty was simply to protect the interests of the owner, he was acting as agent for the owner and would be liable to the owner if he acted negligently. . . . I feel unable to hold that under the clause giving him power to make a final certificate, the sole duty of the plaintiff was to look after the interests of the owner as against those of the builder. Under that clause he owed a duty to the builder as well as to the owner. In agreeing to act under that clause he undertook a duty towards both of them which was to hold the scales fairly and to decide impartially between them the amount which the builder was entitled to be paid by the owner."

The question whether an architect can be liable for negligence in giving an interim certificate has not been determined. In Wisbech R.C. *v.* Ward (1927), 2 K.B. 556, Mr. Justice Sankey decided that an architect, in giving interim certificates under a building contract, was a mere agent and not a *quasi*-judge, and was therefore liable for negligence; and although the Court of Appeal did not dissent from this view or decide that in giving an interim certificate the architect was acting as a *quasi*-judge, they nevertheless overruled the finding of negligence on the view they took of the facts.

So whereas there is no doubt that in granting a final certificate an architect is not liable for negligence, there is still some doubt as to his position in granting an interim certificate.

THE BUILDING TRADE

STEEL ENCASED IN CONCRETE

From a Correspondent.

Structural steelwork, according to the type of building in which it is used, may be left with either a painted surface or covered in with masonry, terra-cotta, concrete, etc. In factory and workshop construction the former type is very common, but it suffers from the disadvantages of requiring painting at intervals and not being fire-resistant. The fire-resisting properties of the latter type depend to a very large extent on the material used for the casing and its thickness. Ordinary stonework is not a reliable protection for steelwork against fire, since a fire of only moderate intensity is practically certain to cause it to be ruined by cracking and spalling which may expose the metal structural members behind it. Terra-cotta or clay tiles often crack and come away easily during fires. The importance of keeping the structural steel free from high temperatures may be gauged from the fact that at 500 deg. F. it begins to lose its strength and at 1000 deg. F. approximately 70 per cent. of its strength has disappeared. Such temperatures are easily reached in ordinary fires, and if maintained for a short time are almost certain to result in the collapse of the exposed structural steel.

No building material is absolutely incombustible. All concretes have low co-efficients of thermal conductivity and temperature expansion, the latter being practically the same as that of steel, so that there is no tendency for steel embedded in concrete to part from the latter. Natural stones and terra-cotta are much inferior in fire-resisting properties to concrete, since the former possess much higher co-efficients of thermal conductivity and expansion. Tests of concretes by Professor Woolson have shown that at points 2 in. below the surface the temperature only reached 500 deg. F. when the external temperature had been maintained at 1500 deg. F. for two hours while under the same circumstances points 3 in. below the surface of the concrete were only heated to a temperature a little above that of the boiling point of water. The great fire at the Edison works in the United States proved that concrete exposed to intense heat for prolonged periods showed no tendency to spall off except at exposed corners. The British Fire Prevention Committee's "Red Book" No. 207, in a comment on this fire, stated that "In the greater portion of the buildings the concrete remained firm, hard, and intact after this severe heat treatment."

During a fire in 1922 in the Pennsylvania State College in the top portion of a building where highly inflammable chemicals were stored the top story was gutted, but the concrete floor prevented the fire from spreading downwards and the remainder of the building was saved from destruction.

The question of the structural value of concrete when used in combination with steel in the form of a column with a very high percentage of reinforcement is one which was carefully investigated at the University of Illinois by Professor Talbot, using a series of columns of the Gray type built up from eight 3 in. by 2½ in. by 5/16 in. angles tied at intervals of 16 in. by 5½ in. by ¼ in. batten plates. Three types of column were tested:

(1) Plain steel columns.

(2) The core type in which the space outlined by the structural members was filled in with concrete; and

(3) The so-called "fireproof" type in which there was a 2 in. layer of concrete outside the steel. The results of Professor Talbot's investigation showed that:

(1) The maximum load carried by the plain steel columns is expressed by the straight line formula

$$\frac{P}{A} = 36{,}500 - 155\,\frac{l}{r}$$

where $\frac{l}{r}$ is the ratio of length of column to radius of gyration of the section of the steel column.

(2) In the concreted columns of the core type the effect of length upon strength of column was almost identical with that found in the tests of plain steel columns. In other words, the stress taken by the concrete may be considered to be nearly independent of the slenderness ratio of the column, within the limits of the lengths tested, and the stress taken by the steel may be considered to be the same as that taken by a plain steel column of the same slenderness ratio.

(3) The stress taken by the concrete within the core or within the spiral is approximately equal to the strength of the concrete in the cylinders tested and to two-thirds of the strength found in the 6 in. cubes.

(4) A basis for design which seems rational is to determine the strength of the steel column by the use of the column formula for the $\frac{l}{r}$ of the steel column and then to consider the concrete of the core section (without reference to the length of the column for any ordinary length ratio, say a length of 15 diameters) to have a stress value proportional to the strength of the plain concrete, say two-thirds of the cube strength. A suitable factor of safety would of course be somewhere applied.

(5) In the test of the fireproofed type of column (which had a shell of concrete outside the steel) the concrete shell remained intact until a deformation was reached as great as that developed at the maximum load in columns of the core type. This integrity of section at high deformations indicates that the presence of the shell need not impose any restrictions upon the working stresses available for the steel and for the core concrete. Of course, there are good reasons for the use of a metal binder like wire mesh or spiral for holding the shell securely in place. The stress carried by the concrete of the shell is only about half of that carried by the core concrete. This lower strength is not objectionable, since the shell is not considered in designing the column. The action of the spiraled columns indicates that the spiral has little effect up to a deformation and load corresponding to the maximum load for an unspiraled column. Beyond this load the column compresses rapidly, and the presence of the spiral adds materially to the strength of the column. The tests do not fix the exact amount of this added strength.

Column tests have also been carried out at the National Physical Laboratory, Teddington, and showed that whereas 4 in. by 3 in. joists, 16 ft. 1 in. long, fail at between 4 and 5.18 tons in compression, similar joists encased in concrete to make a section roughly 8 in. square carried from 48 to 55.2 tons. Other stanchions, 5 in. by 4½ in., carried an ultimate compression load of 12.7 tons when tested; when encased in concrete, 8 in. by 7½ in. in cross-section, the ultimate load carried was raised from 12.7 tons to 40.44 and 46.10 tons for similar stanchions. Roughly, the increased strength of the stanchions is 50 tons in the first series of tests and 32 tons in the second series. These tests show that the stringency of regulations, which make no allowance for this increased strength, might be somewhat relaxed with safety, although one cannot take advantage of the whole increase—a certain proportion of the load being carried by what is normally fire-resisting cover and therefore not always available for load-carrying purposes. Precautions would also be required to ensure that if the concrete were to be regarded as a load-carrying material its area should not be decreased by cutting openings through it for pipes, etc.

The tests carried out on floor slabs at the National Physical Laboratory showed that, where the concrete extends considerably above the top of the joists, the test-load which is defined to be the load at which the proportionality between deflection and load ceases, is considerably increased, while the deflection of the construction at that test load is considerably reduced. Thus, four 4 in. by 1½ in. joists alone carried 7½ tons distributed, when the limit of proportionality was reached, and then at a deflection of 0.66 in. When filled with concrete between the joists and 3 in. above them, making a total depth of 7 in., the test load was increased to 14.3 tons, and the deflection reduced to 0.295 in. The increased strength results from an increase in the effective depth of the construction, the centre of compression now being raised, and the reduction in deflection from the consequent increase in the moment of inertia. As Dr. Faber has pointed out, where the concrete only extends to the top flange of the joists, no advantage from this cause would be expected, nor is any such advantage found from the tests. It is perhaps only fair to observe that these slabs were not fire-proofed on the bottom flanges of the joists, and had they been, the thickness of concrete and the weight of the floors would have been very great before much advantage was reaped from the presence of the concrete. Nevertheless, there are undoubtedly cases where it would be perfectly legitimate to take advantage in the design of this increased strength, and there is no apparent reason why, with suitable safeguards, building regulations should not allow of this strength being taken into account in design. The calculations required are perfectly simple and on an entirely rational basis, which check excellently against actual tests.

A number of covered reservoirs and bridges have been constructed in a new patented method whereby the ordinary forms of rolled steel sections, such as R.S.J.'s angle, tees, and the like, are employed as one part only of the reinforcement, the other part being made up of plain round rods and stirrups mechanically connected thereto; the general principle being to reinforce the tensile flange of the R.S. section by means of rods and the compressive flange and web, by means of the concrete and stirrups, so that the initial structural steel member, which is capable of carrying the constructional loads only, becomes, when reinforced as described, capable of carrying the much greater loads for which the ultimate composite structure of steel and concrete is required. In this system of construction the steel reinforcement is pre-erected, being built up into a complete rigid structure capable of carrying, in addition to its own weight, the temporary timber centering which is suspended therefrom, the dead weight of the wet concrete and all other loads incidental to construction.

Leicester School Buildings.

Leicester City Council has decided that the Newarke Secondary School be removed, and a new school built at a cost of £45,000, and that the present Newarke School buildings be altered for education offices at a cost of £12,000. It was also agreed to apply for permission to borrow £22,000 for alterations to the Town Hall, while the Water Committee recommended the expenditure of £40,911 on new filter plant.

MANCHESTER EXHIBITION

The eleventh Building Trades' Exhibition at Manchester was opened on Tuesday afternoon. Comprising over one hundred and twenty stands, the exhibition gives a very good idea of the progress being made in building materials and methods. As is to be expected with what is probably the oldest trade, there is little that is revolutionary, but architects will view with especial interest the various forms of the new plastic wall decorations which are shown. A new departure is the coloured asphaltic tile, in which pigment has been incorporated without interfering with the unique qualities of asphalt. Metal windows, which may be obtained complete with wood surrounds and ready for fitting direct into the building house, are a further novelty. Woodworkers will be interested in a spindle moulder and shaper, which, with a 4 h.p. engine, obtains up to 6,000 r.p.m without frequency changer.

We append a few notes on some of the more important and interesting exhibits:—

D. Anderson and Son, Ltd., Park Road Works, Stretford. **Stand 45.**

Roofing felts, dampcourses and paints form this exhibition, and all interested in these products should call here. Messrs. Anderson's principal lines in roofing felts include the "Stoniflex," "Rok," and "Hippo" varieties, while dampcourses in several qualities, which meet the requirements of various municipalities and corporations, are also featured. Models, showing these *in situ* on various types of roof, are on view. "Bondex" plastic compound, "Sidol" wood preservatives, and "Siderosthen" paint, are also on exhibit.

Aveling and Barford and Perkins (Sales), Ltd., Aldwych House, W.C.2. **Stand 19.**

What this firm has designated the "Four-in-One" mixer—because it is designed to mix concrete, "compo," haired mortar and tarred stones, without any alteration to the machine—is starred here. This piece is capable of an output of 20/25 cubic yards daily, and is fitted with blades of a new design, giving a combined spade and rake-like action. The frame is of all-steel sections, with an extensible drawbar for easy transportation. Progressive builders will certainly view this stand with interest.

Blackwells and National Roofings, Ltd., Altrincham, Cheshire. **Stand 59.**

Exhibits of interest to architects and builders include roofing felts, underslating felts, packing and insulating felts, dampcourses, metal varnishes and bitumen preparation for roof repairs. Special attention is drawn to "Corona" super-bitumen roofings in three extra heavy weights, and the well-known ply roofings of "Ravenite" and "Blackwells" products, their No. 46. Their dampcourses include "Blackwells" lead bitumen quality and a comprehensive range of Hessian and fibre base dampcourses.

"The Builder," Catherine Street and York Street, W.C.2. **Stand 77.**

Every architect and practical builder will, without fail, visit this stand. On it are displayed the current issues of *The Builder*" newspaper, and the current "Hospitals" issue of *Architecture*. Books relative to the architectural profession and the building trade are displayed in profusion. These include "Estimating for Builders," by J. H. Barns, F.I.O.B., price 6s., teh newest book on the subject; "Law Relating to Dilapidations and Waste," which will be of particular interest to the profession, as well as to surveyors, estate agents and builders; this is by Capt. W. T. Creswell, Hon. A.R.I.B.A., Associate (late Fellow) of the Surveyors' Institution, barrister-at-law, and is sold at 6s. "The Law Relating to Fixtures" is by the same author, and is published at the same price. Antiquarians and historians will find much of interest in "Old London Illustrated," which is a collection of valuable illustrations of old London by the late H. W. Brewer, with descriptive matter by H. A. Cox, F.C.A.; this is priced at 7s. 6d. "The Master Builders' Handbook" and "Approximate Estimating" are among other publications of practical value.

Caxton Floors, Ltd., 16, Caxton-street, S.W.1. **Stand 41.**

On this attractive stand is displayed the hollow-tile produced by this firm, and used in reinforced concrete flooring and other r.c. work. A patented shape gives considerable benefit, we learn, as regards strength, rigidity, economy and lightness—all very essential factors in modern construction. The firm's list of contracts, among which are numbered the "Regal" Cinema, Marble Arch; the new Baker-street office and flat block; Stratton House, Piccadilly; the "Empire" Theatre and Woolwich War Memorial Hospital, would seem to bear out the claims made for this system of flooring.

Colthurst, Symons and Co., Ltd., Bridgwater, Somerset. **Stand 105.**

This neat stand has incorporated in it a great range and variety of tiles. The main roof is covered in "Moss-bitten" pantiles with fitments to match. We learn that this is a new and unique shade, and that the colour is absolutely fast. Other patterns on view are red and toned Roman tiles—which have been specified for a Manchester housing scheme—Italian tiles and a very attractive green glazed Spanish tile. These are all made with a minimum overlay of 3 in. Ingeniously fitted with concealed flood lights, this stand catches the eye and should specially interest architects and builders.

Crittall Manufacturing Co., Ltd., Talbot-road, Stretford, and London. **Stand 16.**

An exhibit of tasteful arrangement and of particular interest to architects for domestic and commercial work is to be seen here. The principal merits of metal windows are that they are not subject to atmospheric conditions. They do not warp or sag and are claimed to be draughtproof. A novelty is the complete window unit, with the wood surround, which can be delivered to the site ready for insertion into the house or building. Architects who are interested in the American theory of bringing building units in so far as possible complete to the site should visit this stand.

Drew, Clark and Co., "Diamond" Patent Ladder Works, Leyton, E.10. **Stand 93.**

Telescopic extension ladders, compact, rigid and strong, are shown here. The "Diamond" (Drew's patent) ladder is made in two or three sections, and is fitted with patent automatic locks in one piece of solid malleable iron. Auto-folding platform steps, and combination steps also find a place, and builders and decorators who wish to eliminate loss of time, noise and large storage rooms should not fail to investigate the "Rap-Rig" scaffold.

G. and T. Earle (1925), Ltd., Hull. **Stand 113.**

On this stand are demonstrated the uses of cement, both from the constructional and artistic points of view. Terrazzos, pavings, wall textures, roughcastings, the possibilities of each is displayed, both in surface and colours. Also shown is a substance called "Retardo." This, applied to the shuttering used for concreting, retards the setting of the surface, and enables, through brushing with a wire brush, the aggregate to be displayed. This surface can then either be left for its decorative effect, or can be used for keying purposes. It is made in two varieties, No. 1 for scrubbed aggregate effect, and No. 2 for natural stone effects.

Educational Supply Association, Ltd., Esavian House, 171-181, High Holborn, W.C.1. **Stand 52.**

Architects and contractors, not to mention business men and householders, who are faced with problems connected with folding and sliding partitions, doors and windows, may with advantage pay a visit here. Displayed are "Esavian" overhead garage doors, which is claimed to be the only overhead door that can be glazed; folding and sliding curved and straight windows, which should make an appeal to architects for open-air schools; and "Esavian" folding and sliding gates, useful for a variety of reasons.

Elsan Manufacturing Co., 34-35, High Holborn, W.C.1. **Stand 64.**

Architects for outlying housing schemes outside sewered areas find as a main problem that of obtaining efficient odourless and hygienic sanitation. Such architects should inspect the "Elsan" system, which has, we learn, been tested and approved by medical officers of health and sanitary authorities, and has been installed already on many estates and sites, including the Royal Estates of Sandringham and Windsor. The apparatus requires no plumbing, water flush, drains, or elaborate disposal plant.

Fernden Fencing and Construction Co., Ltd., Guildford, Surrey. **Stand 3.**

Architects to housing schemes, country estates, sports clubs, etc., who are required to specify fencings, will find on this stand "Fernden" cleft chestnut pale fencing in various designs, and of English manufacture. Wicket and entrance gates in oak and park paling, palisading and boarded fencing are also in display.

Joseph Freeman, Sons and Co., Ltd., Wandsworth, S.W.18. **Stand 119.**

On an attractive stand materials for colouring, hardening and waterproofing cement, concrete, brick, cast stone, asbestos-cement, etc., are in display, under the general name of "Cementone." Coloured concrete panels show how artistically and permanently coloured concrete may be obtained. "Cementone" is of use for producing terrazzo, panels of imitation marble, ornamental tiles, etc. A novel exhibit is the use of "Cementone" No. 2 waterproof powder, used in the mortar between two courses of brickwork, forming what is claimed to be a perfect and economical dampcourse.

Samuel Haskins Bros., Ltd., Walthamstow, E.17. **Stand 31.**

Manually, mechanically and electrically operated steel and wood rolling shutters form this exhibit. Their uses for warehouses, garages, etc., are patent, and require no further explanation. The "Haskins" special swing wicket gate, used in connection with rolling shutters, is also demonstrated. A small exhibit of the firm's bronze metal work, castings and "Kalamein" mouldings is also given.

Honeywill Bros., Ltd., 79, Mark-lane, E.C.3. **Stand 73.**

The display here is of a selection of the "Orthoic" building materials, of which this firm are sole English distributors. The roof of the stand is covered in three types—the improved Marcilles, Pantile and Roman—of "J.D.L" patent interlocking tiles, while Canadian fireproof plaster-boards are used for the partition and fixtures. The floor shows a range of very pleasant "Adamantine" floor tiles, and "Lamb" brand glazed wall tiles of various colours adorn the walls.

Hutchinson and Co., 1, North Parade, Manchester, agents for **Heat and Sound Insulation, Ltd.**, Craven House, Northumberland-avenue, W.C.2. **Stand 112.**

"Thatchboard" or building material made of highly compressed straw is displayed on this stand, and its merits of insulation against heat and sound ingeniously illustrated in practical method. This material is claimed to be cheap, light, non-

inflammable, non-hygroscopic, durable and a good insulator. It provides an excellent keying for plaster, and offers a method for obtaining heat and sound insulation, about which architects should make inquiries.

Limmer and Trinidad Lake Asphalt Co., Ltd., 106, Sackville-street, Manchester, and 34, Victoria street, S.W.1. **Stand 2.**

A special display is made here of coloured asphalt tiles and floorings—which are made by the company under the concession of the Coloured Asphalt Company, Ltd. These products have the advantage of being made in a pleasing range of colours without interfering with the qualities and properties of the asphalt. They are a new departure, and are distinctly worthy of inspection. The Limmer and Trinidad Company's "Lithocrete" and "Fibrophalt" asphalts, for high temperatures and hard traffic, are also on view, as is the acid-resisting "Acetas."

Liner Concrete Machinery Co., Glasshouse Bridge, Newcastle-on-Tyne. **Stands 4 and 5.**

"Liner" patent sand, lime and concrete mixers, driven by 3-h.p. "Lister" petrol engines, are exhibited here. This machine breaks down any small pebbles in the sand and can keep 30 bricklayers supplied with mortar. The "Liner" tilting-drum concrete mixer, of 5/3½ size, both with or without automatic loaders, is also on view. Driven direct, every bearing is a ball bearing. These exhibits are in running order and can be demonstrated.

Marb-L-Cote Distributing Corporation, Ltd., 32, George-street, W.1. **Stand 108.**

An attractive stand, this exhibit shows the uses of the plastic paint, Marb-L-Cote is a decorative substance which can be worked in rugged or textured surfaces. It is permanent and cannot crack, and textures and colour schemes are limited only by the imagination. Many jobs have been carried out by this material, including the internal decoration of the "Regal" Cinema and Oddenino's Hotel and Restaurant, Regent-street, W.

Marshall, Sons and Co., Ltd., Britannia Iron Works, Gainsborough. **Stand 10.**

The "Marshall" concrete mixer, model 4/3, portable type, is the principal exhibit on this stand. It has a capacity of 3 cubic ft. mixed, and a daily output of 20-30 cubic yards. Of tilting-drum type, it has a steel frame, and is run by a "Lister" 1½ h.p. petrol engine. The total weight is under 10 cwt. There is also the 9/6 portable model, a heavier and bigger job, with a 50-60 cubic yard output. A portable "Marshall" oil engine of 12 h.p., a useful power unit for contractors, completes the exhibit.

Millar's Machinery Co., Ltd., Pinner's Hall, E.C.2. **Stand 37-38.**

Mixers for concrete, portable petrol-driven pumps and portable crushing outfits make an arresting display here. Most of the plant can be seen in operation. A feature of the 10/7 mixer is the special jigger device on the power loader, which delivers the material, without any sticking, into the drum. Ball bearings are fitted in this machine.

Frederick Parker, Ltd., Viaduct-street, Leicester. **Stand 49.**

Various types of concrete mixers will interest the contractor here. The O.C. type, of 7/5 capacity, is fitted with a scoop-type automatic loading hopper, with runner guides and a knock-out device to prevent over-winding. A "Lister" 4-h.p. engine provides the power. The "Little Giant" concrete mixer, which has an output of 20-30 cubic yards daily and is suited for dealing with concrete, plaster, mortar and tar-macadam, is also on view, as well as a section of granulators, stone-breakers, etc.

Parker, Winder and Achurch, Ltd., Broad-street, Birmingham. **Stand 60.**

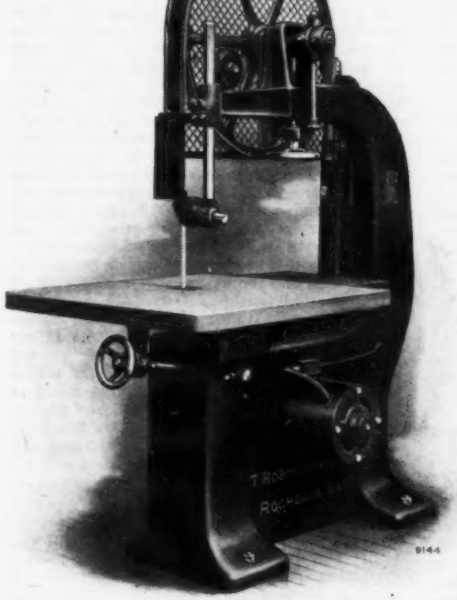
An apparatus that enables one to burn crude oil in place of coke in the boilers of central heating installations, the "Parwinac," is shown here. Entirely automatic in action, a lever on the thermostat controls the operation of the electric motor that drives the atomising device of the oil burner, and so regulates the temperature. The fuel, being fed automatically to the oil-burner, cuts out the task of stoking the boiler.

Thos. Parsons and Sons, 315-317, Oxford-street, W.1. **Stand 30.**

Enamels, paints and water-paints are here in profusion, and are well worth the inquiry of the decorator and builder. "Endelline" enamel, which produces a porcelain-like finish; "Endelflat" flat enamel; "Unicoat" flat finish and "Parsons' Gloss Paint"—all of these washable—are shown, while the merits of "Parso-glaze"—a scumbling paint producing decorative effects of note—are of a nature to deserve special inquiry.

Patent Impermeable Millboard Co., Ltd., Millboard Works, Sunbury, Middlesex. **Stand 53.**

A waterproofed and half-inch thick building board, "Insulwood," is displayed here. It is principally an insulation board, which



Robinson's Band-Sawing Machine.

ensures efficient insulation against heat, cold and sound. It lends itself well to decoration, and may be used as a plaster base. Also shown is "Sundeala"—a waterproofed board for wall and ceiling work.

E. Pollard and Co., Ltd., 84, Oldham-street, Manchester, and St. John-street, E.C.1. **Stand 46.**

On this stand are shown the various improvements which have been added to the "Rolador" steel shutter since it was first introduced. It also shows sections of various parts, including the specially designed 14 B.W.G. lath, the coil, double shaft, method of gearing, and many other new innovations for testing the strength of the springs and ease of operation. We learn that what is probably the greatest single width of shutter in Great Britain, one of 37 ft., has been put into Selfridge's warehouse by Messrs. Pollard.

Rippers, Ltd., Castle Hedingham, Essex. **Stand 123.**

Doors made on a patented principle which eliminates warping and gives lightness and soundproof in addition are exhibited here. These "Hygienic Flush Doors" are in both hard and soft woods, and the stand shows some very delightful specimens. A number of different glazed openings can be supplied also. The "Hygienic" door is suitable for all jobs where something out of the ordinary is required, as in hospitals, infirmaries, office blocks, etc.

Thomas Robinson and Son, Ltd., Railway Works, Rochdale. **Stands 33-34.**

Wood-workers will find on this stand something to interest them. A variety of band-sawing, straightline edging and ripping saw benches, saw spindle mounting, high-speed moulding, planing and matching machines, etc., are on view, and are, in the main, fitted with built-in electric operated motors—i.e., motors which are an integral part of the design. Tenoning machines, chain-cutter, and hollow chisel mortisers are also shown, besides a wide range of tools and specimens of work produced.

J. Sagar and Co., Ltd., Canal Works, Halifax, Birmingham, and London. **Stand 48.**

This exhibit—whose units are all electrically driven—consists of a representative selection of modern woodworking machinery, especially suitable for builders, contractors and others, who require the costs of woodworking operations to be reduced to a minimum. A leading exhibit is the "Premier" combined hand and roller feed surface planing, thicknessing and moulding machine. This has a motor as part of the design, and is, of course, beltless.

Scaffolding (Great Britain), Ltd., 50, Bland Street, Moss Side, Manchester. **Stand 50.**

We commend to the notice of contractors the exhibits on this stand of the various types of safety scaffolding and scaffolding devices manufactured by this company. These comprise:—The patent tubular scaffolding, which is now used for many classes of work where a pole scaffold was formerly employed; and heavy suspended scaffolding—for use on steel-framed buildings—a safe continuous scaffold, which has achieved a great measure of popularity. "Scaffixer" scaffold ties—for use with poles in lieu of hemp or wire lashings—and numerous photographs of work either in progress or of recent completion, complete a useful display.

James W. Southern and Son, Ltd., Store Street Sawmills, Manchester. **Stand 65.**

A display of British "Sasco" (W.S.W. Brand) Columbian pine doors is made here. A large variety of patterns is shown, clearly demonstrating the superior quality and finish of these British-made doors. In addition, samples of redwood garage doors and garden gates are shown. The stand is lined with "Picus" Gaboon mahogany wall board; a wall-board that is all board, made of Gaboon mahogany three-ply, each ply glued on the other by a special waterproof cement, making it impossible for the plys to bulge or come apart under the influence of damp. Architects for housing schemes should make a point of paying a visit here.

Thames Board Mills, Ltd., Purfleet, Essex. **Stand 22.**

On this, a very ingenious and "telling" stand, the properties of "Essex" wall-board are demonstrated, and the methods of applying the board to its use illustrated. The board is an excellent insulator, and is easily decorated. Its uses are numerous. Amongst them it may be mentioned that it is employed for interior lining

of buildings of all kinds. In addition to houses, bungalows, etc., it is used in schools, public halls, cinemas, hotels, and similar buildings.

Turner Bros. Asbestos Co., Ltd., Trafford Park, Manchester. **Stand 40.**

The merits of "Trafford" tiles are displayed on this stand. It is claimed that they are ideal for industrial buildings. They are guaranteed for 20 years. Also on view are "Turnall" asbestos cement slates in brindled, russet-brown, and blue. These are very light, making a lighter roof structure possible. A 20 year guarantee is given here also. Rigid rubber asbestos tiles are shown—for the first time in Manchester—and a display is made also of "Serval" asbestos felt, for roofing, sarking, and under-felting.

Wadkin and Co., Green Lane Works, Leicester, and 165, Queen Victoria-street, E.C.4. **Stand 27.**

The exhibit of machines, all self-contained and electrically driven, is composed of eight models, representations of a large range of machines—each with a reputation for high quality construction. Of primary interest is the vertical spindle moulder and shaper (E.R.H.), fitted with a three-speed motor running at 3,000, 4,500, and 6,000 r.p.m., this last speed being double that obtained before. This is without frequency change. The E.K.A. tending machine is a novelty, in that each spindle carries a built-in motor operated by an individual start. The economy in running effected is obvious.

Winget, Ltd., Grosvenor Gardens, S.W.1. **Stand 29.**

Many of the latest ideas in modern concrete practice are demonstrated on the "Winget" stand, where some of the latest models are shown of a range of concrete machinery. The series of "Winget's" open-drum mixers includes the 7/5 model, with hoist attachment, which has proved useful for *in situ* concrete work. A notable addition to this group is one of the higher discharge models—a great labour-saving device for tipping directly into a jubilee wagon. This is fitted with runway type of elevating hopper. Single-toggle stone crushers and portable brick breakers, and a plate-tamp machine, complete an exhibit which all road surveyors and contractors should not fail to see.

Yorkshire Amalgamated Products, Ltd., 27, Waterdale, Doncaster. **Stand 122.**

This exhibit displays "Lockwood's" high magnesium hydraulic building limes, produced at Warmsworth Cliffe and Anston Quarries: these are as used in the building of the Royal Infirmary, Royal Exchange, and London-road Station, Manchester; Lime-street Station Hotel, Liverpool; Liverpool New College, Memorial Buildings, Rossall School, and many other public works throughout Lancashire. Also shown are "Stairfoot" double pressed cherry red facing bricks, and engineering bricks, besides various other types. There is a brick here to interest every architect and builder.

Young, Osmond, Young, Ltd., 47, Victoria-street, S.W.1. **Stand 103.**

Shown here are "Unity" tubular electric heaters, claimed to be the most economical and trouble-free heating system for schools, churches, offices, factories, hospitals, theatres, private houses, conservatories, etc. A further exhibit is of "Unity" tubular four-bar radiators for use where wall space is limited, available with or without three-heat control. These are used in conjunction with "Unity" Thermostats for use in conjunction with electric heating to economise current and to maintain a constant temperature. A selection of blue prints and photographs, giving details of a few of the more interesting "Unity" tubular electric heating installations recently carried out, completes a novel and interesting display.

WORKMEN'S COMPENSATION

"CHILDREN'S ALLOWANCE."

The House of Lords has recently given a decision in the case of Shott's Iron Co., Ltd., *v.* Curran (*Weekly Notes*, February 23), on that very complicated section of the Workmen's Compensation Act, 1925 (8 sub-section (1)), which relates to the compensation payable in fatal cases. The sub-section provides "The compensation under this Act where death results from the injury shall be a lump sum of an amount calculated in accordance with the rules hereinafter contained, together with, if the workman leaves a widow or other member of his family (not being a child under the age of 15) wholly or partially dependent upon his earnings, and in addition leaves one or more children under the age of 15 so dependent, an additional sum (hereinafter referred to as the children's allowance) of an amount calculated in accordance with the rules hereinafter contained, so, however, that the lump sum and children's allowance (which shall be added together and dealt with as a single sum) shall not in any case exceed in the aggregate £600."

We think that anyone reading this sub-section by itself, seeing that it speaks of the workman leaving a widow or other member of his family, and, in addition, one or more children under the age of 15 wholly or partially dependent upon him, would take the view contended for by the appellants in this case that it referred to children of the deceased workman, but the words "or other members of his family" introduce further considerations, for by section 4, sub-section (3), it is enacted that "unless the context otherwise requires," the expression "member of a family" shall include a number of relations downwards from grandparents to half-brothers and sisters. In the case in question the workman left a mother, and eight brothers and sisters, all under the age of 15, partially dependent upon him, and the majority of the House of Lords (Lord Carson dissenting) held that the arbitrator was right in awarding a lump sum to the mother plus a children's allowance of £250 to the brothers and sisters, as the right to compensation is made to rest on the fact of dependency and not on the legal right to support, and the appeal was dismissed.

The Court of Appeal has already decided this point in the same way in Faulkner *v.* Owners of the Ship "Sutton" (1927, 1 K.B. 207), where a boy of 16 was killed who had been contributing to the support of his family. That family consisted of his mother and stepfather and two sisters under the age of 15 years, and an award in favour of the mother with a "children's allowance" in favour of the two sisters was upheld. The stepfather's claim was not pressed.

There does, however, appear one point which may yet have to be considered by the House of Lords. In the case of Pritchard *v.* Bettisfield Colliery, Ltd. (1925, 2 K.B. 284; noted in our eighth article on Workmen's Compensation, March 5, 1925), the deceased workman left a widow and an illegitimate grandchild, under the age of 15, both wholly dependent. Now the first part of section 8, sub-section (1), speaks of "a widow or other member of his family," but "member of a family" is defined in section 4, sub-section (3), unless the context otherwise requires, as meaning wife or husband, father, mother, grandfather, grandmother, stepfather, stepmother, son, daughter, grandson, granddaughter, stepson, step-daughter, brother, sister, half-brother and half-sister, viz., all legitimate relationships. But by section 4, sub-section (1) it is provided "where the workman, being the parent or grandparent of an illegitimate child, leaves such a child dependent upon his earnings, or, being an illegitimate child, leaves a parent or grandparent so dependent," these are to be dependents.

The Court of Appeal held that the words "or other member of his family" did not govern the whole sub-section, but only applied up to the words "and in addition leaves one or more children under the age of 15," and that in regarding the children's allowance, dependency is the test, and a dependent child or grandchild, whether legitimate or not, comes within the sub-section.

The House of Lords in the case under consideration referred to this decision as containing dicta supporting the conclusion the House had arrived at, but the Lord Chancellor is reported as saying that he reserved any opinion on whether the Court of Appeal was right in construing the sub-section as including illegitimate children.

NOTICES OF BREACH OF COVENANT TO REPAIR

We may notice a point decided last year in the case, Cannon Brewery Co. *v.* Signal Press (44 T.L.R. 486), which turned on sections 146 and 196 of the Law of Property Act, 1925. The Brewery Company were claiming possession of premises for breach of a covenant to repair contained in a sub-lease. The defendants were in possession as under-tenants under a mortgage, the mortgagor (the original under-tenant) not appearing, and the only point on which comment is called for is the question of service of notice of the breach complained of. A schedule of the dilapidations specifying the breaches complained of had been served on January 14, 1927, addressed to the original under-lessee by handing it to a forewoman on the premises.

Section 146 of the Law of Property Act, 1925, provides: "A right of re-entry or forfeiture under any proviso or stipulation in a lease for a breach of any covenant or condition in the lease shall not be enforceable by action or otherwise unless and until the lessor serves on the lessee a notice specifying the particular breach complained of . . ." and section 196, subsection (2) provides: "Any notice required or authorised by this Act to be served on a lessee or mortgagor shall be sufficient although only addressed to the lessee or mortgagor by that designation, without his name, or generally to the persons interested, without any name, and notwithstanding that any person to be affected by the notice is absent or unascertained." The original under-lessee in this case had not been heard of. Then sub-section (3) provides: "Any notice required or authorised by this Act to be served shall be sufficiently served if it is left at the last-known place of abode or business in the United Kingdom of the lessee, lessor, mortgagee, mortgagor, or other person to be served, or in the case of a notice required or authorised to be served on a lessee or mortgagor is affixed or left for him on the land or any house or building comprised in the lease or mortgage."

It was contended by the defendants that the notice must be physically affixed to the building or left on the building, and it was not sufficient if it was left with any person other than the lessee unless that person was specifically authorised by the lessee to accept service, but the Court held that the words "left for him" included leaving the notice with some person on the premises if there were reasonable grounds for supposing that that person would pass it on to the lessee if possible.

As, so far as this case is concerned, the words used in the Law of Property Act merely reproduce the conditions laid down in the Conveyancing Act, 1881, we should imagine this point must have been decided long ago, but the decision may be noted as the latest pronouncement on the question.

NEW BUILDINGS IN LONDON

Carey-street.—Offices.—The Law Society have recently acquired the premises at No. 23 for adaptation as new offices and headquarters.

Dulwich.—Bank.—Messrs. Lloyds Bank, Ltd., are to erect a new bank at Dulwich Chalet.

East Ham.—Houses.—The local council has given sanction to Messrs. J. Stokes and Sons, builders, High-street, E.6, for the erection of 218 houses, including nine shops, in Roman-road and Saxon-road.

Fetter-lane.—Reconstruction.—The premises of the Art Reproduction Co., Ltd., are to be reconstructed. The contract for the work has been placed with Messrs. J. Jennings and Son, Ltd., 42, Leman-street, E.1, whose tender amounted to £10,955. The plans have been prepared by Messrs. Percy Tubbs, Son and Duncan, 39, Great James-street, Bloomsbury, W.C.1.

Finchley.—Bank.—New bank premises with flat and shop are to be erected at the junction of Fortis Green and Great North-road, Finchley, for Messrs. Barclays Bank, Ltd.

Fulham.—Additions. — The Metropolitan Asylums Board have given approval to the carrying out, at a total estimated cost of £32,590, subject to the sanction of the Ministry of Health, of the scheme for the provision of additional isolation accommodation at the Western Hospital, Fulham, S.W.

Hackney.—The Mentmore Manufacturing Co., Ltd., have decided to extend their Tudor-grove factory, N.9, by the erection of new works and warehouse premises. The architect is Mr. Clifford Aish, 22, Bedford-street, Strand, W.C.2.

Hayes.—Factory.—A single-story building is to be erected shortly to the plans of Messrs. Goodwin and Chapman, architects, 43, Old Queen-street, Westminster, S.W. The builders are Messrs. J. W. Buckingham and Sons, 22, Circus-street, N.W.8. The steelwork will be supplied and erected by Messrs. Matthew T. Shaw and Co., Ltd., Millwall, E.14.

Ilford.—Extension.—The Committee of the Loxford Social Club have in contemplation a scheme for the extension and alteration of their premises at 61, Ilford-lane. Plans are now being prepared by the architect, Mr. E. Meredith, F.R.I.B.A., 7, Goodmayes-road, Goodmayes.

Lambeth.—Premises.—Mr. E. W. Wallis, 395, Norwood-road, is the architect for new premises on the southern side of Wolfington-road, S.W.

Lambeth.—Housing.—The Borough Engineer of the Lambeth Council has submitted plans, which have been approved, for 100 flats, etc., on the Cottington-street site, at a cost of £51,300.

Lambeth.—Additions.—Additions are to be made to the training school at Lambeth North station for the London Underground Railways. The plans have been prepared by Mr. S. A. Heaps, L.R.I.B.A., 55, Broadway, Westminster, S.W. The cost will be about £8,000.

Marylebone.—Rebuilding.—The work of rebuilding the old premises at 41-55, Baker-street, W.1, is to be put in hand at once. A contract for the scheme has been placed with Messrs. Hammond and Barr, Ltd., Sloane-avenue, Chelsea, S.W.3. The architect is Mr. C. H. Brightiff, A.R.I.B.A., 131, Baker-street, W.1.

Moorgate. — Rebuilding.—Messrs. Jones, Lang and Co., estate agents, King-street, Cheapside, E.C.2, have purchased on behalf of clients the freehold site of Nos. 55-61. The new owners are erecting a large block of offices and showrooms. The plans for the building are being prepared by Mr. Gervase Bailey, King's-building, Smith-square, Westminster, S.W.

Munster-square.—Institute.—The Council of St. Mary Magdalene Church, N.W.1, have acquired a large site where it is proposed to erect a new church institute.

Neasden.—School.—The Neasden Wesleyan Circuit have decided to accept the tender of Messrs. H. Knight and Son, 16, Brucegrove, Tottenham, N., for the erection of their proposed school chapel. The building will hold about 300 persons, and will cost approximately £7,000. The architects are Messrs. George Baines and Son, FF.R.I.B.A., 121, Victoria-street, S.W.1.

New Malden.—Church.—The New Malden Wesleyan Church are shortly to issue an appeal for funds in connection with their scheme for the erection of a new church. The plans for the buildings show an edifice to seat 500 persons, which, together with the church hall, will cost a total of £16,500. The architect is Mr. George E. Withers, F.R.I.B.A., 50, Cannon-street, E.C.4.

Norwood-road. Premises.—Bethell, Swannell and Durnford, architects. 16a, John-street, W.C.2, have made an application to the Lambeth B.C. for plans for a new building on the forecourt of 294 and 296, Norwood-road.

Old Broad-street.—Extension.—The directors of the Anglo-South American Bank, Ltd., are considering a scheme for the considerable extension of their London headquarters. It is understood that adjoining premises are to be acquired and pulled down for the new banking hall and offices. The architects are Messrs. M. E. and O. H. Collins, 115, Old Broad-street, E.C.2.

Pall Mall.—Alterations.—The Quadrant Trust, Ltd., have in view the carrying out of extensive alterations and improvements to their office premises at 55-58, Pall Mall, and 2-5, Crown-court, S.W.1. The cost will be approximately £20,000. The works will be supervised by Messrs. Hood Bros., 8, Union-court, E.C.2.

Riding House-street.—Additions. — Plans have been prepared for additions to the Radium Institute, and have been approved by the Governors. The architect is Mr. T. P. Figgis, F.R.I.B.A., 9, Old-square, Lincoln's-inn, W.C.2.

Seymour-street.—Flats.—The large vacant corner site adjoining Sherwood-court is to be utilised for the erection of a block of self-contained flats of high-class design. The building will contain over 100 flats, 100 lock-up garages, chauffeurs' quarters, shops on one frontage, etc. The plans have been prepared by Mr. W. E. Masters, A.R.I.B.A., architect to Mr. Martin Harvey, 124, Baker-street, W.1, the building owner.

Shoreditch.—Factory.—The site at 19-21, Kingsland-road, E., has been acquired by a London boot and shoe factor for the erection of large warehouse and shop premises. The arrangements are in the hands of Messrs. Chamberland and Willows, Goswell-road, Clerkenwell, E.C.1.

Sidcup.—Shops.—A site in the Sidcup High-street has been acquired for development by the erection of a block of shops and flats. The plans have been prepared by Messrs. Montague Holmes and Sons, 37, Paternoster-row, St. Paul's Churchyard, E.C.4.

Sydenham —Extensions.—Plans have been prepared for the altering of the interior accommodation, together with an addition, of the Rosendale Hotel, in Rosendale-road, S.E.21. The owners of the property are Messrs. Watney, Combe, Reid and Co., Ltd., the brewers, whose architect is Mr. G. G. Macfarlane, A.R.I.B.A.

St. Martin's-le-Grand.—Offices.—A block of offices is to be built on the site at the junction of St. Martin's-le-Grand and Cheapside,, E.C.2, for Messrs. Chesterton and Sons. The builders will be Sir Walter Lawrence and Sons, Ltd., 31, Sun-street, Finsbury-square, E.C.2. The plans have been prepared by Messrs. Herbert O. Ellis and Clarke, 3, Old Queen-street, Westminster, S.W.1.

Victoria Embankment. — Building.—The building on the Victoria Embankment formerly the L.C.C. Education and Tramway offices, are now being demolished to make way for new office premises. Messrs. B. Goodman, Ltd., housebreakers, are carrying out the demolition.

Westminster Bridge-road.—Building.—Mr. R. E. Smith, F.R.I.B.A., 235, Westminster Bridge-road, S.E.1, has submitted an application to the Lambeth Council for a building at St. Thomas's Church, Westminster Bridge-road, abutting on Pearman-street.

West India Docks —Sheds.—Additional transit sheds, with new quayage, etc., are to be erected at the West India and Millwall Docks for the Port of London Authority. The operations will be supervised by the engineering staff of the Authority, whose consulting engineers are Messrs Rendal, Palmer and Tritton, of Dartmouth-street, Westminster, S.W.

Willesden.—Factory.—The contract for the erection of the large factory, referred to in our last issue, has been placed with Messrs. Bovis (1928), Ltd., 43, Upper Berkeley-street, W.1. The architect is Mr. W. Morris Geall, Windsor House, Victoria-street, S.W.1, and the quantity surveyors are Messrs. Gleed, Sons and Co., 8, Martin's-lane, E.C.4.

Wimbledon. — Extensions. — Mr. E. A. Chapman, licensee of the Wimbledon Hill Hotel, has in view the erection of additions to the hotel. The plans have been prepared by Messrs. R. J. and J. S. Thomson, FF.R.I.B.A., 49, Hill-road, Wimbledon, S.W.

Wimbledon. — Buildings. — Tenders are being invited for the erection and completion of (1) Town Hall; and (2) Municipal Buildings proposed to be erected on a site facing the Broadway, for the Wimbledon B.C. Messrs. Bradshaw Gass and Hope, of Bolton, are the architects.

NEW CINEMAS

Arley, Warwickshire.—There is a proposal on foot to erect a cinema on a prominent site in this village.

Baginton.—Plans have been approved for the development of the Home Farm estate by the erection of 1,000 houses, shops, cinema, hotel, etc. The architects are Messrs. Ingall, Bridgewater & Co., 147, Corporation-street, Birmingham.

Glasgow.—A private company, the Kelvin Cinema, Ltd., has been registered in Edinburg, with a capital of £16,000, to erect in Glasgow a cinema, the "Kelvin." The architect to the company is Mr. A. V. Gardner, Claremont, Westerton, near Glasgow. The registered offices are at 55, West Regent-street, Glasgow.

Harringay.—Messrs. J. Stanley Beard & Clare, of 101, Baker-street, W.1, are architects for a new super-cinema at Langham-road and Green-lanes, Harringay, for the Langham Estates, Ltd. No contract has been let yet for the building, which is expected to commence early in the summer. The cinema is planned to hold about 5,000.

Hounslow.—Mr. Cecil Masey, of Devereux-court, Essex-street, Strand, W.C.1, is architect for the new theatre at London-road, Hounslow, for the Hounslow Theatre, Ltd., of 5, Clement's-inn, W.C.1. Designed to hold 2,500 persons, it will be fitted for the exhibition of films.

Manchester.—The conversion of the Rivoli Palais de Danse, in Oxford-road, to a cinema of 1,500 capacity will shortly be undertaken.

Salisbury.—Plans have come before the Town Council for the conversion of the City Halle to a 1,600-capacity cinema. The alterations, which will cost £40,000, are in the hands of Messrs. O'Donoghue & Halfide, architects, of 5, Great Turnstile, High Holborn, W.C.1.

Swinton (Lancs).—Arrangements have been made to alter the Swinton Public Hall and Palais de Danse into a super-cinema, the Capitol, to hold 1,750, at a cost of £17,000. The architects are Messrs Drury & Gomersal, architects and surveyors, Imperial-buildings, Oxford-street, Manchester.

Wigan.—The Town Council have now passed the plans for the "Plaza" cinema, announced in our issue for March 22. Building operations are expected to commence at once. The architect is Mr. W. Ellis, 9, Hardshaw-street, St. Helens, Lancs.

RATES OF WAGES IN THE BUILDING TRADE

[Every endeavour is made to ensure accuracy but we cannot be responsible for errors.]

	Masons.	Bricklayers.	Carpenters Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Accrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Aldershot	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Alfreton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Alnwick	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Altrincham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ashford Kent	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Ashington	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2·
Ashton-under-Lyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Aylesbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Aylsham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Banbury	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Barnsley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barnstaple	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Barrow-in-Furness	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Basingstoke	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Berwick	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bexhill	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Birkenhead	1/10	1/10	1/10	1/11	1/10	1/10	1/9½	1/4½
Birmingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bishop Auckland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackburn	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackpool	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bolton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bradford-on-Avon	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Braintree	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Brentwood	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bridgwater	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Bridlington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bristol	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bromsgrove	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bromyard	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Bungay	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Burnley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Burton-on-Trent	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bury	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Buxton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Cambridge	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Canterbury	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Cardiff	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Carlisle	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chatham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Chester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chesterfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chorley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Cirencester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Clacton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Cranbrook	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Crewe	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Cromer	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Darlington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Deal	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Denbigh	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Derby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Devizes	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Dewsbury	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Doncaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Dorchester	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Dorking	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Dovercourt	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Driffield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Droitwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Eastbourne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
E. Glam. (Mon. Val.)	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Ely	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Exeter	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/5½	1/2
Exmouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Fakenham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Felixstowe	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Frome	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Glossop	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Godalming	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Goole	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Gosport	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Grantham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Grimsby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Guildford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Halifax	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Harpenden	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Harrogate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hartlepools	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Harwich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hatfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Hednesford	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Hereford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Herne Bay	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Hertford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hitchin	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hoddesdon	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Holt	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Huddersfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hull	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hunstanton	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Huntingdon	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Isle of Wight	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Keighley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Kettering	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Kidderminster	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
King's Lynn	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Lancaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leeds	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leicester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leighton-Buzzard	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Lichfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Lincoln	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Littlehampton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Liverpool	1/10	1/10	1/10	1/11	1/10	1/10	1/9½	1/4½
Llandudno	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Llanelly	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
London:								
12 m. radius	1/9	1/9	1/9	1/9*	1/9	1/9	1/8	1/4
12-15 m. radius	1/8½	1/8½	1/8½	1/8½*	1/8½	1/8½	1/7½	1/3½
Loughborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Lowestoft	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Luton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Macclesfield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Maidstone	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Malvern	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Manchester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Mansfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Margate	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Market Harb'rough	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Matlock	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Melton Constable	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Melton Mowbray	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Merthyr Tydfil	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Middlesbrough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newark	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Newbury	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newcastle-on-Tyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newcastle-ur-Lyme	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
New Forest	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newmarket	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newport, Mon.	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Norwich	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Nottingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½*	1/2½
Nuneaton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oldham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Paignton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Peterborough	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Plymouth	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	1/2½
Pontypridd	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Preston	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ramsgate	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Redcar	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Redditch	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Reigate	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Retford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Ripon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Rochdale	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Rochester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Rugby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Saffron Walden	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
St. Helens	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Sawbridgeworth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Saxmundham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Sevenoaks	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Sheffield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Sittingbourne	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Southampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Southend-on-Sea	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
South Shields	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stevenage	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Stockport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stockton-on-Tees	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stoke-on-Trent	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stourbridge	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stourport	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stowmarket	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Stratford-on-Avon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Stroud	1/5	1/5	1/5	1/5	1/5	1/5	1/4½	1/0½
Sunderland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swaffham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Swansea	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swindon	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Tamworth	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Taunton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Thetford	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Torquay	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Totnes	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Trowbridge	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Uttoxeter	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wakefield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Wallsend	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Warminster	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Warrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Warwick	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Wells (Norfolk)	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Welwyn Gar. City	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
West Bromwich	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Weston-sup.-Mare	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Weymouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Whitby	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Wigan	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Winchester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Windsor	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Wisbech	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Wolverhampton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Woodbridge	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Worksop	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Worthing	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Wrexham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Wroxham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Wymondham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
York	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½

* The rate recognised by the National Association of Plasterers, Granolithic and Cement Workers, is 1/11½ per hour.

For Building Trade wages in Scotland, see page 709.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed, that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given is the latest date when the tender, or the names of those willing to submit tenders, may be sent in, the name and address at the end is the person from whom or place where quantities, forms of tender, etc., may be obtained.

Following is a list of abbreviations:—Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; County Architect, C.A.; Surveyor, S.; Engineer, E.: Borough Architect, B.A.: Architect, A.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

APRIL 15.

Ardrossan. — Building. — Post Office, for H.M.O.W. Architect, H.M. Office of Works, 122, George-st., Edinburgh. Dep. £1 1s.

Ashton-upon-Mersey.—Houses.—8, off Green-lane, for U.D.C. Matley, Brotherton & Mills, architects, Court-chambers, Old Milligate, Manchester. Dep. £3 3s.

Ballater.—Painting.—Outside Albert and Victoria Halls. J. Stewart, secretary.

Birmingham.—Houses.—216 parlour-type, and 168 non-parlour type on Tennal Hall Farm estate, Harborne, for T.C. H. H. Humphries, City E. and S. Dep. £1 1s.

Blackpool.—Alterations.—Gas department offices, Princess-st., for Corporation. F. Wood, B.E. and S. Dep. £2

Bromley, Kent.—Buildings.—Erection of block for the accommodation of domestic staff at the Institution at Locksbottom, Farnborough. F. Danby Smith, F.R.I.B.A., Parliament-mansions, Victoria-st., Westminster, S.W.1. Dep. £2.

Carlton.—Houses.—16, on Valley-rd. site, for U.D.C. J. A. West, A.R.I.B.A., S., Manor-rd. Dep. £1 1s.

Clown.—Houses.—21 pairs, Southfield-lane, Whitwell, for R.D.C. J. Haslam, architect, Ryton-chambers, Bridge-st., Worksop.

Devon.—Painting, Whitecliff Hospital, Torquay, for C.C. Architect's Office, 97, Heavitree-rd., Exeter.

Dublin.—Station.—Transformer station at Fleet-st., for Electricity Supply Board. V. Kelly, architect, 4 and 5, Grafton-st. Dep. £10 10s.

Henstead.—Repairs.—Chimneys and structure of Union House, Swainsthorpe, for B.G. R. W. Jones, clerk.

Irvine.—Houses.—(1) 3 blocks each of 4 houses of two apartments; (2) 3 blocks each of 4 houses of three apartments, for T.C. A. R. Wilson, T.C. Dep. £1 1s. each.

Leeds.—Painting—For (a) external painting of several buildings; (b) tar painting, repair and surfacing of asphalt paths and courts, at Menston Mental Hospital, for West Riding Mental Hospitals Board. W. E. H. Burton, architect and engineer, West Riding Mental Hospital Board Offices, Wakefield.

Liverpool.—Alterations.—Heyworth-st., Webster-rd., Tiber-st. and Brae-st. Council schools, for T.C. Land Steward and Surveyor. Dep. £2 2s. each.

Liverpool.—Houses.—(a) 62, Fazakerley Hall estate, and (b) 90 Norris Green estate, for T.C. Acting Director of Housing, Municipal-bldgs., Dale-st. Dep. £1 1s.

Manchester.—Extensions.—Workshop and new coal store, at Barton Power Station, for T.C. H. C. Lamb, Chief Engineer and Manager, Electricity Department. Dep. £2 2s.

***Manchester.**—Houses.—Erection of four houses and upwards, at Moston-Lightbourne Extension, where sites for 326 houses exist, for the Housing Committee of the City of Manchester. Housing Director, Town Hall, Manchester. Dep. £2 2s., to the City Treasurer.

Rochdale.—Painting.—At Birch Hill hospital, Dearnley, for B.G. I. C. Clegg, clerk.

Seaham.—Houses.—22, on Council's housing sites at Anlaby and Kirkella, for R.D.C. W. E. Warburton, architect, 13, Bowlalley-la., Hull. Dep. £2.

Sleaford.—Repairs.—Pump and fencing around same, in parish of Ormsby, for R.D.C. E. H. Sills, E.

Smallburgh.—Cottages, 6 pairs, Hoveton St. John, for R.D.C. A. Peploe, clerk, North Walsham.

Staines.—Cinema.—Erection of, at Staines, Middlesex, for the Majestic Theatres Corporation, Ltd. S. B. Pritlove, architect, 6, Sherwood-st., Piccadilly-circus, W.1. Dep. £3 3s.

Swansea. — Painting. — External, houses:—(a) Trewyddfa, 53; (b) Cwm-rd., 50, for Corporation. Borough Architect, 3, Prospect-place.

Tranent.—School.—R.C. school, for East Lothian R.C. R. & A. K. Smith, surveyors, 4, Forres-st., Edinburgh.

Ystrad Mynach.—Building.—Pavilion and construction of other works, for District Welfare Association. Hon. Secretary, J. Jarman, 7, Lewis-st.

APRIL 16.

Ballinrobe.—Additions.—Also alterations to Monastery attached to Christian Brothers' Schools, Ballinrobe, Co. Mayo, for Rev. Brother E. M. O'Connor, Superior. J. J. Robinson, F.R.I.B.A., architect, 8, Merrion-sq. N., Dublin. Dep. £1 1s.

Bridgend.—Painting.—External wood and iron work of all buildings at Parc Gwyllt Mental Hospital, for Glamorgan County Mental Hospital. H. W. Davies, clerk, Bridgend.

Brighton. — Altering, Repairing, etc. — Boy's, girls' and infants' w.c., etc., at the Warren Farm Schools, Brighton, for the Guardians of the Brighton Parish. E. Wallis Long, architect, 6, Old Steine, Brighton.

Epsom.—Repairs.—Internal repairs, cleaning and painting at Union Hospital, Dorking-rd., for B.G. A. C. Williams & Fettett, architects and surveyors, Ashley-rd.

Fareham.—Houses.—6, School-rd., Wickham, for R.D.C. L. W. Hunt, S., Council Offices, 97, West-st.

Hull.—Installation.—Low pressure hot water heating apparatus at certain schools, for E.C. R. C. Moore, Director of Education. Dep. £1 1s.

Kirkby Lonsdale.—Houses.—2 pair parlour, and 4 pair non-parlour, for U.D.C. W. E. R. Thomas, S. Dep. £1 1s

Leeds.—Schools.—New secondary schools for Far Headingley, for 1,200 pupils, for E.C. Education Department (Architect's Section), Calverley-st. Dep. £2 2s.

Limerick.—Church.—At St. Mary's, for Revd. Hannan, P.P. Ashlin & Coleman, architects, 7, Dawson-st., Dublin. Dep. £3 3s.

Llantarnam.—Houses.—20, Cocker-av., Cwmbran, for U.D.C. S. Dep. £2 2s.

Rochdale.—Painting: (1) railings and pavilion at Buersil bowling green, (2) fencing and netting at Springfield; and foreman's house and golf house (internal), for C., B.B.S.

Sheffield.—Houses.—112 non-parlour, on Wisewood estate, for T.C. W. Geo. Davies, F.R.I.B.A., City Architect. Dep. £2.

Sligo.—Houses.—28, at Cleveragh, for Corporation. J. P. Quinn, B.S. Dep. £2 2s.

Taunton.—Store.—At Electricity Works, St. James'-st., for T.C. B.S.

APRIL 17.

Alderley Edge and Wilmslow.—Sub-station, for Electricity Board. W. P. Cobbett, 49, Spring-gardens, Manchester.

Bridge.—Houses.—8 at Bridge, and 8 near Littlebourne, for R.D.C. H. K. Blundell, Building Surveyor, Bridgford House, Bridge, near Canterbury.

East and West Flegg.—Houses.—37, for R.D.C. R. Gournay Ferrier, clerk, 16, South-quay, Great Yarmouth. Dep. 10s.

Glasgow.—Jobbing Work.—For T.C. D. Stenhouse, T.C.

Hendon and Sutton.—Building Work, etc.—(a) New recreation hall, Colindale Hospital, Hendon; (b) alterations to boiler house, Downs Hospital, Sutton, Surrey, for the M.A.B. Office of the Board, Victoria Embankment, E.C.4. Dep. £1 in respect of each work.

Howden.—Houses.—8 non-parlour, for R.D.C. F. Turner, architect, Carlisle-st., Goole. Dep. £1 1s.

London.—Installation.—Electric light, at hostel, Little Gray's Inn-lane, Gray's Inn-rd., E.C.1, for M.A.B. T. Cooper, Engineer-in-Chief. Dep. £1.

Shetland.—Repairs.—Also alterations to Presbytery of Burravoe, and Presbytery of Olnafirth, for Church of Scotland. Geo. Bennett Mitchell, architect, 1, West Craibstone-st., Bon-Accord-sq., Aberdeen

Sturminster.—Housing.—Pair non-parlour type houses in Lydlinch, for R.D.C. G. F. Hazell, architect, Bath-rd., Sturminster Newton. Dep. £2 2s

***Various Places.**—Cleaning and Painting.—At various hospitals, for the M.A.B. Office of the Board, Victoria Embankment, E.C.4. Dep. £1 in respect of each work.

Wimbledon.—Buildings.—Erection and completion of (1) Town Hall; and (2) Municipal Buildings proposed to be erected on a site facing the Broadway, for the Wimbledon B.C. H. Emerson Smith, LL.B., T.C., Town Hall, Wimbledon, S.W.19. Dep. £5.

APRIL 18.

Birmingham.—Installation.—Call lighting system at Dudley-rd. Hospital, for B.G. C. P. Beech, clerk, Union Offices, Edmund-st.

Cheadle and Gatley.—Houses.—70, on Oak-rd. housing site, Cheadle, for U.D.C. Acting Surveyor Dep. £2 2s.

Greenwich.—Laundry Additions.—Erecting a small addition to the laundry depot at the Greenwich and Deptford Hospital, Vanbrugh-hill, for the Guardians of the Greenwich Union. Alfred Roberts, F.R.I.B.A., 92, London-st., Greenwich, S.E.10. Dep. £2.

Hull.—Fencing.— Wooden boundary fencing at Infectious Diseases Hospital, Cottingham Castle estate, for T.C. D. Harvey, A.R.I.B.A., City Architect. Dep. £2 2s.

Hull.—Fencing.—Wood fencing at Sutton Ings school site, for E.C. R. C. Moore, Director of Education.

Hull.—Heating.—Heating chambers at St. Paul's school, for E.C. R. C. Moore, Director of Education. Dep. £1 1s.

Lancashire.—Extensions.—Bacup and Rawtenstall Secondary school, for E.C. Stephen Wilkinson, F.R.I.B.A., 16, Ribblesdale-place, Preston. Dep. £2 2s.

Leeds.—Conveniences.—Urinals and conveniences at Middleton, York-rd., and Ley-lane, for T.C. J. E. Acfield, City E.

London.—Painting.—Cleaning and repainting Station buildings, etc., at Monmouth, Usk, etc., and Colwall, Ledbury, etc., for G.W.R. F. R. E. Davis, secretary, Paddington Station, W.2.

London.—Repairs.—Also re-decoration of "Woodlands," Vanbrugh-hill, Greenwich, for Greenwich B.G. W. C. Cornish, clerk, Board Room, Woolwich-rd., East Greenwich, S.E.10

Meath.—School.—Technical school, Bective-st., for Kells U.D.C. M. Grace, Oldcastle. Dep. £3 3s.

St. Columb Major.—Houses.—Dolgery Post, St. Ervan, block of 2 houses; Carloggas site, Mawgan, block of 4 houses; Trewince Turning, St. Issey, block of 2 houses; Trebarber, St. Columb Minor, block of 2 houses, for R.D.C. H. V. Jones, Sanitary Surveyor. Dep. £2 2s.

***St. Marylebone.**—Various Works.—(a) Repairs, painting, pointing, etc. (b) Maple floors, twin stoves and basins; (c) Stainless steel shelves at St. Marylebone Hospital, Rackham-st., W.10, for the M.A.B. Frederick W. Shenton, F.R.I.B.A., 27, Fitzroy-st., W.1. Dep £1 Treasury Note.

APRIL 19.

Bristol.—Building Works.—Alterations and additions to (1) Kingswood P.O., etc., and erection of new telephone exchanges at (2) Bedminster; (3) Easton; (4) Cheltenham-rd., for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., S.W.1. Dep. £1 1s. in each case.

Liverpool. — Sub-station. — At Cable-court and Cable-st., for T.C. Land Steward and Surveyor.

Paisley.—Additions.—Also alterations to North Public school, for Renfrewshire E.C. J. Hamilton Pullar, Executive Officer, 16, Glasgow-rd.

Plymouth.—Alterations.—At Harson Villa, Valletort-place, Stonehouse, for E.C. J. Wibberley, City Engineer, Surveyor and Architect, Sun Buildings. Dep. £2 2s

Rotherham.—Houses.—12, off Morthan-rd., Wickersley, for R.D.C. C. O. Rawstron, E. and S. Dep. £2 2s.

***St. Marylebone.**—Painting, etc.—At St. Marylebone Home, Northumberland-st., W.1, for the Guardians of the Poor of the Parish of St. Marylebone. Frederick W. Shenton, F.R.I.B.A., 27, Fitzroy-st., W.1. Dep. £1.

Sandbach.—Conversion.—Old shop at Mallins Bank into a cottage, for Sandbach Industrial Co-operative Society, Ltd. A. Price & Sons, architects.

APRIL 20.

Bentley.—Building.—Police Station, for West Riding C.C. P. O. Platts, A.R.I.B.A., County Architect, County Hall, Wakefield.

Claremorristown.—School.—New National school. T. F. Macken, P.P., V.G.

Durham. — Painting. — Outside various County Police stations and houses, for C.C. W. J. Merrett, 43, Old Elvet, Durham.

Edinburgh.—Reconstruction.—74-82, Grassmarket, for T.C. E. J. MacRae, A.R.I.B.A., City Architect.

***Northallerton.**—Extension.—Of County Hall, for the North Riding of Yorkshire E.C. The Architect, County Hall, Northallerton.

Stoke-on-Trent.—Extensions.—At the North Staffordshire Technical College, Stoke-on-Trent, comprising laboratories, mine machinery and advanced science rooms, classrooms, etc. The Clerk to the Governors, Town Hall, Hanley, Stoke-on-Trent. Dep. £5 5s.

APRIL 21.

Wakefield.—Cleaning.—Clayton Hospital. H. Maw, general superintendent and secretary.

APRIL 22.

Ashborne.—Houses.—22 non-parlour, for U.D.C. D. Powell, S.

Bingley.—Sanatorium.—At Training College, for West Riding C.C. Education Department, County Hall, Wakefield.

Bournemouth.—Hot Water, Heating Plant, etc.—Hot water plant heating, ventilation, laundry plant, and electrical generating plant in connection with new swimming baths for the Bournemouth B.C. F. P. Dolamore, F.S.I., Borough Engineer, Town Hall, Bournemouth. Dep. £5 5s.

Chelmsford.—Houses.—100, on Boarded Barns estate, together with fences, laying of house drainage and formation of paths appertaining thereto, for T.C. E. J. Miles, B.E. Dep. £2 2s.

Chertsey.—Cottages, Drainage, etc.—Erection of 50 cottages (25 pairs), formation of drainage, fences, etc., on the Housing Estate near Station-rd., Addlestone, for the U.D.C. Ernest J. Castle, Clerk, Council Offices, Chertsey. Dep. £1 1s.

Edinburgh.—School.—At Saughton Mains, for E.C. J. A. Carfrae, architect, 3, Queen-st.

Southwick.—Transformer House.—Construction of foundation works and building for a transformer house at Southwick generating station, near Brighton, for the Central Electricity Board. Richard H. Fox, Sec., Trafalgar buildings, 1, Charing Cross, W.C.2. Dep. £2 2s. first copy and £1 1s. for each subsequent copy.

APRIL 23.

Belfast.—Extensions.—To Nurses' Home at Infirmary, for B.G. Young & MacKenzie, chartered architects, Belfast. Dep. £5 5s.

Belfast.—Alterations.—At Union Workhouse, for B.G. T. H. M'Murray, consulting engineer. Dep. £2 2s.

Bishop's Castle.—Houses.—3 pairs non-parlour, in Corporation-st., for T.C. P. W. Cooper, B.S.
Leeds.—Houses.—64 on Meanwood Housing Estate, for T.C. J. E. Acfield, City E.
Lymington.—Cottages.—12 pairs, at Milford-on-Sea; 15 pairs, at Pennington; 3 pairs, at Boldre, for R.D.C. R. O. L. Lovell, sanitary surveyor, "Cuckfield." Ambleside-rd. Dep. £2 2s.
Maldon.—Painting.—External, workmen's dwellings:—8, near The Brook, Tolleshunt Knights; 8, The Street, Latchingdon; 6, The Street, Steeple, for R.D.C. Wm. Almond, S., 6, Market-hill.
Middlesbrough.—Post Office.—Erection of, at Haverton Hill, Middlesbrough, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.
Middlesex.—Decorative and Other Works.—At the Institution at Isleworth and elsewhere, for the Brentford Union. F. E. Harmsworth, clerk, Toolands House, 34, Twickenham-rd., Isleworth, Middlesex.
Sudbury.—Houses.—39, on Wents estate, for T.C. F. P. Earee, L.R.I.B.A., 36, Market-hill. Dep. £2 2s.

APRIL 24.

Fulham.—New Home for Nurses.—Erection of, at the Western Fever Hospital, Seagrave-rd., S.W.6, for the M.A.B. Office of the Board, Victoria-embankment, E.C.4. Dep. £1.
***Southport.**—Steel Casements.—At the Springfield Pumping Station, Aughton, near Ormskirk, for the Southport, Birkdale and West Lancashire Water Board. C. Burton Ede, M.Inst.C.E., Engineer and Manager, 14, Portland-st., Southport.
Sunderland.—Houses.—76 three-roomed and 120 four-roomed, at Ford estate, and 54 three-roomed and 6 four-roomed, at Marley Pots estate, Southwick, also 76 four-roomed at Marley Pots estate, Southwick, for C.B. B.E. Dep. £2 2s. each.
Warwick.—Houses.—106, on Packmores estate, for T.C. R. Wormell, B.E. and S. Dep. £2 2s.

APRIL 25.

Manchester.—School.—New Moston Municipal school, for E.C. F. E. Wargreck Howell, T.C. Dep. £2 2s.

APRIL 26.

Hornsey.—Pile Foundations.—Construction of a piled sub-structure for the electricity sub-station at Oakfield-rd., Stroud Green, N.4, for the Hornsey T.C. W. H. Adams, B.E. and S., Town Hall, Southwood-lane, Highgate, N.6.
Reigate.—Houses.—Erection of 7 blocks of 4 non-parlour houses in Philanthropic-rd., Earlswood, Redhill, for the Reigate B.C. Fred. T. Clayton, B.S., Municipal Buildings, Reigate. Dep. £3 3s.
Stoke and Wolstanton.—Heating.—Installation, independent heating and hot-water service in 2 cottages, nursery, and receiving block at Penkhull Children's Homes, for B.G. T. Wood, clerk, Union Offices, Stoke-on-Trent.

APRIL 27.

***Bexhill.**—Deck at the Colonnade.—Erection of wood and glass screens in steel framing on brick walling, sliding shutters across the Parade, for the Bexhill B.C. G. Ball, Borough Surveyor, Town Hall, Bexhill. Dep. £1 1s.
London.—Repairs.—St. Marylebone Hospital, Rackham-st., W.10, for St. Marylebone B.G. F. W. Shenton, F.R.I.B.A., 27, Fitzroy-st., W.1. Dep. £1.

APRIL 29.

***Bicester.**—Houses.—Erection of 4 pairs in various parishes, for the Bicester R.D.C. Eustace F. T. Davis, Sanitary Surveyor, Hethe, near Bicester. Dep. £2.
Brentford.—Hospital Buildings.—(*a*) Maternity building; (*b*) electrical and X-ray department and wards; (*c*) staff quarters; (*d*) additions operating room and mortuary; (*e*) alterations boiler house and new disinfector room, at the West Middlesex Hospital. F. E. Harmsworth, Clerk, Brentford Union, Toolands House, 34, Twickenham-rd., Isleworth, Middlesex. Dep. £2 in respect of (*a*), (*b*) or (*c*).
Ellesmere Port.—Houses.—264, on Grange Farm estate, for U.D.C. T. W. Francis, clerk.
***Hove.**—Alterations.—Altering the offices and various rooms, including re-decorating, etc., at the Town Hall, for the Hove B.C. Borough Surveyor, Town Hall, Hove.
***Paddington.**—Demolition, etc., Works, and Construction.—Of new wharf building and contingent works (cube approx. 67,000 feet, at No. 26 Wharf, 175, Harrow-rd., W.2, for the Paddington B.C. Borough Engineer, Town Hall, Paddington, W.2 Dep. £1 1s., to the Borough Treasurey.
Tenterden.—Houses.—Erection of 48 on nine sites, for the Tenterden R.D.C. J. Munn-Mace, Clerk, Tenterden, Kent. Dep. £2 2s., by cheque.

APRIL 30.

Bilston.—Installation.—Electric light and power in new High School for Girls, Wellington-rd., for Staffordshire E.C. Maffett, Rosher & Mann, consulting engineers, Union-chambers, Temple-row, Birmingham. Dep. £5 5s.
Cavan.—Additions.—Also alterations to surgical hospital, for Cavan County Board of Health and Public Assistance. T. F. Brady, secretary, Boardroom, County Home, Cavan. Dep. £5 5s.
Stafford.—Installation.—Electric light in girls' High school, for Staffordshire E.C. Moffett, Rosher & Mann, consulting engineers, Union-cham., Temple-row, Birmingham. Dep. £3 3s.
Sunderland. — Schools. — Proposed elementary schools and central schools, Swan-st., Newcastle-rd., for C.B. H. Craven, T.C. Dep. £2.
***Wokingham.**—Post Office and Telephone Exchange.—Erection of at Wokingham, for the Commissioners, H.M.O.W. Contracts Branch. "ing Charles-st., London, S.W.1. Dep. £1 1s.

MAY 1.

***Staines.**—Telephone Exchange.—Erection of at Staines, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

MAY 2.

***London.**—Telephone.—Erection of "Silverthorne" Exchange, Chingford, E., for the Commissioners, H.M.O.W. Contracts Branch, —ng Charles-st., London, S.W.1. Dep. £1 1s.

MAY 7.

Barnsley. — College. — Mining and Technical College, for E.C. Evan Davies, Director of Education. Dep. £5 5s.

MAY 10.

***Brighton.**—Buildings.—Erecting new high tension switch rooms, with cable basements, etc., at the Electric Light Station in North Road, for the Brighton C.B. Wm. H. Overton, F.R.I.B.A., F.S.I., 38 and 39, West-st., Brighton. Dep. £5 5s.
Salvador.—Building.—Construction, certain public buildings, cleansing and canalising of sand bed of the Candelaria and of the River Acelhuate, for Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X. 7722.)

MAY 14.

Brentford.—Workshops and Lavatory.—Erection of, for engineer's staff, at the West Middlesex Hospital. F. E. Harmsworth, Clerk, Brentford Union, Toolands House, 34, Twickenham-rd., Isleworth, Middlesex.

MAY 16.

***Lambeth.**—Various Works.—Structural Alterations, external repairs to libraries, for the Lambeth B.C. Osmond Cattlin, T.C., Lambeth Town Hall, Brixton Hill, S.W.2 (stamped addressed envelope).

NO DATE.

Ashington.—Extension.—To hospital. G. B atty, honorary architect, Greenholme, Ashington.
Bedford.—New Handicraft Building.—Erection of, adjoining the Bedford Modern School, for the Governors of the Harpur Trust. George P. Allen, F.R.I.B.A., 81, High-st., Bedford. Dep. £2 2s.
Colwyn Bay. — Redecorations. — Engedi C.M. Chapel. D. Ll. Davies, Greenbank, Brompton-av.
Dundee.—Alterations.—House at cleansing department, East Dock-st., for T.C. G. Baxter, City E., 91, Commercial-st.
Dundee.—Shelter.—At Downfield Park, for Corporation. G. Baxter, City E., 91, Commercial-st.
Ipswich.—Offices.—At 12, Museum-st., for C.B. E. McLauchlan, B.S. Dep. £2 2s.
Mansfield.—Redecorating.—Relief Office, Stockwell Gate. West Lodge, Chesterfield-rd., and Rock House, for B.G. Vallance & Westwick, White Hart-st.
Northwich.—Houses.—24, in Church-walk, for U.D.C. J. Brooke, engineer and surveyor. Dep. £2 2s.
Upperheaton.—Decorating.—Interior, Wesleyan Church. H. Jagger, Warren House, Kirkheaton.

MATERIALS, etc.

APRIL 15.

Belfast.—Wood Blocks.—90,000, for C.B. R. B. Donald, City S.
Loughton.—Limestone, etc.—For U.D.C. H. White, S.
Oakham.—Granite.—For Rutlandshire C.C. B. A. Adam, clerk.
Radcliffe.—Road Materials.—For U.D.C. G. E. Wrigley, E. and S.
Sudbury.—Road Materials.—For T.C. R. G. Coles, B.S.
Tenterden.—Highway Materials.—For T.C. W. L. C. Turner, B.S.

APRIL 16.

Drighlington.—Pipes, etc.—For U.D.C. S.
Manchester.—Highway Materials.—For T.C. City E.
Sowerby.—Road Materials.—For U.D.C. J. Eastwood, S.

APRIL 17.

Hull.—Paving.—300,000 paving blocks, for T.C. T. Thomas, City E.
London.—Building Materials.—For G.W.R. F. R. E. Davis, Secretary, Paddington Station.
Motherwell and Wishaw.—Road Materials.—For T.C. B.E.
Newhaven.—Tar, etc.—For U.D.C. S.

APRIL 19.

Argyll.—Paints, etc.—For Argyle and Bute District Mental Hospital, Lochgilphead. House Steward.

APRIL 20.

Bolton-upon-Dearne.—Road Materials.—For U.D.C. W. H. Adams, S.
Ebbw Vale.—Tarmacadam.—For U.D.C. E
Romford.—Road Materials.—For U.D.C. F. G. Beaumont, E. and S.

ENGINEERING, IRON AND STEEL

APRIL 15.

Braintree.—Sewerage.—Provision and laying of about four miles of sewers, consisting of glazed stoneware and cast-iron pipes, varying in diameter from 15 in. to 6 in., together with storm overflow chambers, manholes, flushing chambers, and other appurtenant works, in parishes of Kelvedon and Feering, for R.D.C. J. D. Haworth, consulting engineer, 3, Central-buildings, S.W.1. Dep. £5.
Macclesfield.—Sewerage.—Extensions at Poynton-with-Worth sewage disposal, for R.D.C. Parker Pearson & Ross Hooper, engineers, Dallas-chambers, Chippenham. Dep. £5.

APRIL 16.

Kilkenny.—Drainage.—Construction of septic tanks and outfall, with 1,000 yds. of 21 in. dia., intercepting sewer, syphon pipe under River Nore, with about 2,000 yds. of 18 in., 15 in. and 12 in. main sewers and 4,000 yds. of 9 in. local sewers and house connections, manholes, vent shafts, etc., for U.D.C. Pierce F. Purcell, consulting engineer, Ashton, Killiney, Co. Dublin. Dep. £10.
Reading.—Sewerage.—Sewage disposal works at Manor Farm, for C.B. B.S. Dep. £2 2s.
Tipperary.—Reconstruction.—Of Aileen-bridge, on Tipperary-Dundrum main road, for South Riding C.C. T. P. Meade, C.S., Clonmel. Dep. £5.

APRIL 17.

Cardiff.—Reconstruction.—Of bridge, consisting of four spans of 47 ft. 6 in. each, by 70 ft. wide, over River Taff, in lieu of the existing bridge, which is to be demolished to the level of the tops of the existing abutments and piers, for T.C. City E. Dep. £3 3s.
Dumfries.—Tower.—Water cooling tower, for T.C. W. S. Johnston, engineer and manager, Electricity Works, Leafield-rd.
Near Birmingham.—Reconstruction.—Together with widening and improvement of approaches of Hopwood Canal Bridge, for Worcestershire C.C. C.S., 30, Foregate-st., Worcester. Dep. £2 2s.

APRIL 18.

Culham.—Reconstruction.—Of part of Nuncham viaduct over River Thames near Culham Station, for G.W.R. Engineer at Paddington Station, W.2. Dep. £2 2s.
Nenagh.—Extension.—Of water supply, for U.D.C. S. T. O'Neill, T.C. Dep. £5 5s.
Totnes.—Reservoir.—Also laying 1,050 yds or thereabouts of 3 in. cast-iron water pipe, at Dittisham, for R.D.C. W. F. Tollit, S., 6, Bridgetown. Dep. £2 2s.

APRIL 19.

Dublin.—Bridge.—Reinforced concrete girder bridge, of 38 ft. clear span, at Glasnevin, for C.B. G. J. Sherlock, T.C.

APRIL 22.

Bridlington. — Wall. — New sea wall and promenade, two slipways and reinforced concrete shelters on North Foreshore, for T.C. B.S. Dep. £3 3s.
Holland.—Culvert.—Laming's bridge and culvert over South Holland main drain, near Holbeach, for C.C. Wm. A. Rogerson, C.S., Boston. Dep. £3 3s.

APRIL 23.

Oldham.—Sewage.—Detritus tanks, sludge tanks, stormwater tanks, and various other works at Corporation Sewage Works, Foxdenton-lane, Chadderton, for C.B. B.E. and S. Dep. £2 2s.

APRIL 25.

Johannesburg.—Bridgework.—For South African Railways and Harbours. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X. 7623.)

APRIL 29.

Welwyn Garden City.—Widening.—Bridge crossing main line of the L. and N.E. Railway, for U.D.C. Capt. W. E. James, S. Dep. £2 2s.

MAY 1.

Bradford-on-Avon.—Extensions.—Also alterations, sewage disposal works, at Holt, for R.D.C. Parker Pearson & Ross Hooper, engineers, Dallas-cham., Chippenham. Dep. £2.
Wolverhampton.—Reconstruction.—Railway bridge at Park Village, for C.B. H. B. Robinson, B.E. Dep. £3 3s.

MAY 2.

Isle of Thanet.—Sewerage.—680 lin. yds. of 18-in. cast-iron sea-outfall, sedimentation and storage tanks, sludge beds, pump house, etc., and 1,893 lin. yds. of 21-in. concrete pipe sewer, 1,850 lin. yds. of 7-in. and 9-in. stoneware pipe sewers, with manholes, ejector chamber and compressor house, and other incidental works, at Birchington, for R.D.C. G. L. Butterworth, S. Dep. £5.

MAY 16.

Johannesburg.—Structural Bridge Work.—For South African Railways and Harbours. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X.7699.)

ROAD, SEWERAGE, AND WATER WORKS

APRIL 15.

Bentley-with-Arksey. — Making-up. — Street, for U.D.C. P. C. Woodhall, E. and S. Dep. £1 1s.
Chelmsford.—Extensions.—1,060 yds. lin. of 7 in. stoneware sewer, with manholes and other works, at Broomfield, for R.D.C. Lemon & Blizard, engineers, 9, Victoria-st., Westminster. Dep. £2 2s.
Chelmsford.—Extension.—(a) 420 yds. of 7 in. and 8 in. stoneware sewer, and works incidental thereto, and (b) 260 yds. of 6 in. road surface water drain, at Writtle, for R.D.C. J. Dewhirst, E., Waterloo-lane Dep. £1.
Chiswick.—Road Widening, etc.—Widening and reconstruction of Lionel-rd., Brentford, from Popes-lane to the Great West-rd., for the Brentford and Chiswick U.D.C. Edward Willis, M.Inst.C.E., F.S.I., Engineer and Surveyor, Town Hall, Chiswick, W.4.
Denbighshire.—Improvements.—Corners on main Holyhead-rd., for C.C. E. A. Evans, C.E., 46, Clwyd-st., Ruthin. Dep. £5.

Dunstable.—Paving.—Also surfacing Blows-rd., Borough-rd., Downs-rd., Grove-rd., Park-rd., and Capron-rd., for T.C. W. F. Wilkins, B.S.

Hailsham.—Extension.—Sewer in Collingwood-rise, Heathfield, for R.D.C. W. O. Humphery, engineer, 17, London-rd.

Helensburgh.—Pipe.—Providing and laying of about 485 lin. yds. of 12 in. to 18 in. sewer pipe and relative works, for T.C. B.S. Dep. £1 1s.

London.—Paving.—2 in. mastic asphalt paving on reinforced concrete foundations in Half Moon-lane (part of), and Village-way, for Camberwell B.C. W. Bell, B.E. and S.

Sandwich.—Mains.—Materials and laying and jointing 6 in. diam. water mains, with necessary sluice valves, hydrants, specials, etc., for T.C. Wm. H. Moultrie, Acting Waterworks Manager, The Barbican. Dep. £4.

APRIL 16.

Cardiff. — Streets. — Muirton-rd.; Skelmuir-rd.; Tweedsmuir-rd.; Clydesmuir-rd.; Dessmuir-rd.; Dalmuir-rd.; Derwen-rd.; Fairwater-av.; Fairwater-lane North; Fairwater-lane South; Grey Friars-lane; Grey Friars-place; Crockherbtown-lane, for T.C. City E.

London.—Paving.—Paving and forming roadway and footways of Ambiecote-rd., Lee, for Lewisham B.C. B.S.

Sutton and Cheam.—Surface Tarring.—For U.D.C. W. Hedley Grieves, E. and S.

APRIL 17.

Birmingham.—Paving.—(1) 3,550 sq. yds. in Glovers-rd., Small Heath; (2) 6,200 sq. yds. in Coventry-rd., between Flora-rd. and Church-rd.; (3) 4,600 sq. yds. in Golden Hillock-rd., between Walford-rd. and Warwick-rd., for T.C. H. H. Humphries, City E. and S. Dep. £3.

Glasgow.—Gates.—Iron railings and gates at Knightswood (852 houses), for T.C. D. Stenhouse, T.C.

Tavistock.—Main.—Laying water main and another work in connection with water supply for Walkhampton, for R.D.C. T. H. Harris, Sanitary Inspector.

APRIL 18.

Blackwell.—Water Supply.—4,186 lin. yds. cast-iron mains, together with connections and contingent works, for R.D.C. A. H. Elliott, engineer, Gilcroft-chambers, Church-lane, Mansfield. Dep. £2 2s.

Hull.—Roads.—Construction of roads, and drainage at Infectious Diseases Hospital, Cottingham Castle estate, for T.C. D. Harvey, A.R.I.B.A., City Architect. Dep. £2 2s.

Plympton St. Mary.—Main.—Providing and laying 200 yds. 6 in. diameter water main and appurtenant works, for R.D.C. E. Dep. £1 1s.

South Shields.—Making-up.—Mayfair-gardens, Imeary-st. (part), and St. Peter's-av., for C.B. J. Paton Watson, B.E. Dep. £1 1s.

Totnes.—Pipes.—Providing and laying 654 yds. or thereabouts of 3-in. cast-iron water pipe from Shinner's-bridge to Cott Darlington, for R.D.C. W. F. Tollit, F.

Weymouth. — Making-up. — Victoria-rd., Wyke Regis, for T.C. G. G. H. Symes, clerk, 9, East-st.

APRIL 20.

Ayr.—Pipes.—39,700 lin. ft. of 16-in. diam. bitumen-lined steel pipes, together with bitumen-lined steel specials and cast-iron specials, and other pipes, for T.C. Warren & Stuart, engineers, 94, Hope-st., Glasgow. Dep. £2 2s.

Ayr.—Water Supply.—Excavation and refilling of trenches for, and laying and jointing of 13,500 lin. yds. of 16-in. diam. steel pipes between lower end of Loch Doon and Patna, and other relative work, for T.C. Warren & Stuart, engineers, 94, Hope-st., Glasgow. Dep. £2 2s.

Glamorgan. — Drains. — Connection of existing drains at Drymma-hall, Skewen, near Neath, to public sewer, for C.C. W. Gough Jenkins, Deputy-clerk of the County Council, Glamorgan County Hall, Cardiff.

Pontefract.—Reconstruction.—Of roadway over and approaches to Tanshelf Bridge, on Leeds and Barnsdale main road, for West Riding C.C. West Riding Surveyor, County Hall, Wakefield. Dep. £1.

South Stoneham.—Improvements.—Of West End-rd., West End, near Southampton, for R.D.C. W. R. Cowell, S. Dep. £2 2s.

West Kent.—Sewer.—6,625 yds. of concrete tube sewer, 27 in., 24 in., 21 in. and 18 in. diameter together with manholes and other incidental works, in the parishes of West Wickham and Keston, for Main Sewerage Board. A. E. Scott Murray, engineer. Dep. £3 3s.

APRIL 22.

Coseley.—Sewer.—150 lin. yds. of 6 in. soil sewer, with manholes, etc., for U.D.C. G. Edwin Mitchell, E. and S. Dep. £1 1s.

Durham.—Reconstructing.—Allergate, for Corporation. J. W. Green, City E. and S. Dep. £2 2s.

Hoo.—Improvements.—The Avenue to Four Wents, for R.D.C. Wm. J. Stimpson, E. and S. Dep. £5 5s.

Hull.—Sewers.—Concrete roads and sewers, also laying of pipe sewers, etc., on Derringham Bank housing estate, for T.C. T. Thomas, City E.

London.—Reconstruction.—Of tramways, Whitechapel High-st., for L.C.C. Chief Engineer, Old County Hall, Spring Gardens, S.W.1. Dep. £5.

Wicklow.—Main.—640 lin. yds. of 3-in. cast-iron water main at Boghall, Bray, for County Health District Committee. J. T. O'Byrne, B.E., Bridge-st., Wicklow.

APRIL 23.

Oldham.—Making-up.—Onchan-av.; Fenton-st.; Staley-st.; Eric-st. (part of), from Red Hall-st. to Clarksfield-rd.; Thurland-rd.; Cleeve-rd.; Chesham-rd.; Furtherwood-rd.; passage off Clarksfield-rd. at rear of 1 to 13, Glen-rd., for C.B. B.E. and S. Dep. £2 2s.

Port Talbot.—Drainage.—2,000 lin. yds. of 18 in., 12 in. and 9 in. diameter stoneware pipe sewers, together with manholes and other incidental works, for T.C. B.S. Dep. £2 2s.

Southport.—Paving.—Levelling, paving, metalling and making good Sandbrook-rd., Ainsdale (part), for C.B. A. E. Jackson, B.E. Dep. £2 2s.

Southport.—Paving.—Levelling, paving, metalling, and making good Griffiths-drive, Stretton-drive and Broughton-avenue, for C.B. A. E. Jackson, B.E. Dep. £2 2s.

Tottenham.—Making-up.—Kimberley-rd.—sec. 1; Carew-rd.—sec. 1; Tiverton-rd.—remainder, for U.D.C. E. Dep. £1.

APRIL 24.

Argyll.—Spraying.—Surface spraying with tar or bitumen, about ten miles of roadway, for Mid-Argyll District Committee of C.C. C. C. MacArthur, S., Lochgilphead.

Argyll. — Resurfacing. — With tar grouted macadam, about four miles of roadway, for Mid-Argyll District Committee of C.C. C. C MacArthur, Surveyor, Lochgilphead.

APRIL 26.

Reigate.—Roads.—Forming two new roads on Corporation housing site, off Philanthropic-rd., Earlswood, Redhill, for T.C. F. T. Clayton, B.E. and S. Dep. £3 3s.

APRIL 27.

Bexley.—Making-up.—Danson-cres.; Selwyn-cres.; Park-approach; Dansington-rd.; Launcelot-rd.; Hook-lane; Edmund-rd.; Coton-rd.; Cleveland-rd.; Vaughan-rd.; Bowford-av.; Jenton-av., for U.D.C. W. T. Howse, S. Dep. £2 2s.

APRIL 29.

London.—Paving.—Woodpaving works, Bishop's-rd.; Douglas-place (part length); and Praed-st. (part length), for Paddington B.C. B.E. Dep. £1 1s.

MAY 2.

Isle of Thanet.—Sewerage.—270 lin. yds. of 18-in. concrete pipes, 1,600 lin. yds. of 15-in., 2,500 lin. yds. of 12-in., 13,400 lin. yds. of 9-in., 1,700 lin. yds. of 7-in. stoneware pipe sewers, with manholes and other works incidental thereto, and 6-in. stoneware pipe house connections between sewer and boundary of roads, at Birchington, for R.D.C. G. L. Butterworth, S. Dep. £5.

MAY 7.

Gosforth. — Improvements. — South Corner of Salters-rd., at junction with High-st., for U.D.C. G. Nelson, E. and S.

NO DATE.

Blackpool.—Sewers.—New streets, sewering, etc., at Blackpool Garden City, Marton. Halstead Best, F.R.I.B.A., 20, Clifton-st., Blackpool.

Auction Sales, Tenders, etc.

APRIL 23.

London.—Henry Butcher, Hall & Co. will sell by order of Messrs. Farmer & Brindley, Ltd. (who are retiring from business) on the premises, 63, Westminster Bridge-rd., S.E.1, stone and marble working machinery, woodworking machinery, miscellaneous plant, etc. Auctioneers, 63 and 64, Chancery-lane, London, W.C.2.

APRIL 23 AND 24.

Plymouth.—Peter Hamley & Sons will sell, by order of Messrs. Geo. Shellabear & Sons, Ltd., Contractors, Plymouth and London, at the Plymouth Depot, Laird Bridge-rd., the whole of the machinery, plant and tools, Foden wagons, sectional offices, etc. Auctioneers, St. Catherine's Chambers, 11, Princess-square, Plymouth.

MAY 7.

***Camberley.**—Sadler & Baker will sell, by order of Executors (unless previously sold by private treaty), at the Central Hall, Camberley, the Tekels Castle Estate of about 85 acres. Auctioneers, Camberley, Surrey.

MAY 8.

London.—Hillier, Parker, May & Rowden will sell, at the London Auction Mart, 155, Queen Victoria-st., E.C.4, building land, the freehold, Belmont Estate, 106 acres, Mill Hill and Totteridge. Auctioneers, 27, Maddox-st., W.1.

Public Appointments

APRIL 15.

Chiswick.—Junior Engineering Assistant required by the Brentford and Chiswick U.D.C. Edward Willis, M.Inst.C.E., F.S.I., Engineer and Surveyor, Town Hall, Chiswick, W.4.

APRIL 16.

Ipswich.—(1) Travelling Clerk of Works (permanent appointment), (2) Architectural Assistant (temporary appointment), required in the County Architect's Dept. by the East Suffolk C.C. Cecil Oakes, clerk, County Hall, Ipswich, Suffolk.

APRIL 18.

London.—Temporary Assistant Quantity Surveyors, on the staff of the Miners' Welfare Committee, required by the Secretary of Mines. Under-Secretary for Mines, Establishment Branch, Mines Dept., Dean Stanley-st., S.W.1.

***Stoke-on-Trent.**—Temporary Architectural Staff required by the Guardians of the Stoke and Wolstanton Union, in connection with proposed new Hospital and Nurses' Home. W. Pendleton, Guardians' Architect, Union Offices, High-st., Stoke-upon-Trent.

APRIL 19.

Southgate.—Engineering Draughtsman required in the office of the Surveyor by the Southgate U.D.C. A. E. Lauder, clerk, Southgate Town Hall, Palmer's Green, N.13.

APRIL 20.

***Barking.**—Resident Engineer required to supervise the laying of about 600 lineal yards of intercepting sewer, manholes, pump house, etc., by the Barking Town U.D.C. R. A. Lay, M.Inst.C.E., Engineer and Surveyor, Public Offices, East-st., Barking, Essex.

Huddersfield.—Clerk of Works required by the Huddersfield C.B. to superintend the erection of public swimming baths. J. Henry Field, T.C., Town Hall, Huddersfield.

Middlesex.—Headmaster required by the Middlesex E.C. at the Tottenham Technical (Building) School, as from June 1, 1929. H. M. Walton, secretary, Edu. Offices, 40, Eccleston-sq., S.W.1.

***Paddington.**—Supervisor of Paving Works required by the Paddington B.C. W. F. Abbiss, T.C., Town Hall, Paddington, W.2 (stamped addressed foolscap envelope).

APRIL 22.

***Fulham.**—Foreman Painter required by the Guardians of the Parish of Fulham. L. Prichard, clerk, Guardians' Offices, 129, Fulham Palace-rd., London, W.6. Stamped and addressed foolscap envelope.

APRIL 23.

***Epsom.**—Clerk of Works required by the Epsom Union in connection with works of re-drainage of the house portion of the Guardians' Institution, Dorking-rd. Alick G. Ebbutt, clerk, Mead House, 61, South-st., Epsom.

APRIL 24.

***Finchley.**—Temporary Architectural Assistant required by the Finchley U.D.C. in the Engineer and Surveyor's Department. Percival T. Harrison, M.Inst., 9, The Hawthorns, Regents Park-rd., Finchley, N.3.

APRIL 30.

***Staffordshire.**—Deputy Architect required by the Staffordshire E.C. F. A. Hughes, Director of Education, County Education Offices, Stafford, enclosed "Deputy Architect."

MAY 22.

London — Forthcoming Examination. — Male Cartographers in the Hydrographic Department of the Admiralty. The Secretary, Civil Service Commission, Burlington-gardens, W.1.

JUNE 6.

***London.**—Forthcoming Examination.—Assistant Examiners required in the Patent Office. The Secretary, Civil Service Commission, Burlington-gardens, W.1.

CONTRACTS PLACED

Buckhurst Hill.—ADDITIONS.—Large additions are being erected at the Cottage Hospital, at a cost of about £7,000. The builder is Mr. Smith, of Abridge, Essex. The plans have been prepared by Mr. R. C. Foster, architect, 47, Monkhams-lane, Woodford Green.

Cambridge.—EXTENSIONS.—The Pye Radio, Ltd., have decided to enlarge their factories and offices. The contract for the work has been placed with Messrs. Coulson & Son, Ltd., St Andrews-street.

Cardiff.—SHOPS.—The contract for the erection of the first block of shop, showroom and office building at the corner of Queen-street and Dumfries-place has been placed with Messrs. Knox & Wells, of Cardiff. The building has been designed by Messrs. Hillier, Parker, May & Rowden (Surveyors' Department), 27, Maddox-street, W.1. The quantity surveyor is Mr. H. W. Langdon, 292, High Holborn, W.C.1.

Petts Wood.—SHOPS.—A large number of shops and flats are to be erected in Station-square, and the contract for the first block is in the hands of Mr. F. E. Knight, 40, Bishop's-road, E.2. The plans have been prepared by Messrs. Montague Holmes & Sons, 33, Paternoster-row, St. Paul's-churchyard, E.C.4.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians, B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B. of E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board; Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; County Architect, C.A.; Surveyor, S.; Engineer, E.; Borough Architect, B.A.; Architect, A.

Adwick-le-Street.—Empsall, Clarkson & Clarke, L.R.I.B.A., Permanent-chams., Piece Hall-yard, Bradford, architects for R.C. school to accommodate about 300 children, for Rev. J. Donkers. Estimate is £9,000.

Ashington.—Recreation and social institute with swimming bath and offices be erected at £20,000.

Bath.—T.C. considering purchase of land for extensions technical college.

Beddington and Wallington.—U.D.C. approved:—6 houses, The Chase, W. Bradfield; 8 houses, Upper-rd., A. Oliver; 4 detached houses, Buckingham Way, H. T. Perryman; 12 houses, Rookwood-av., W. Pitt.

Billingham.—U.D.C. to invite tenders for public offices to plans prepared by architects.—Decided make application to M.H. permission proceed with building another 500 houses.

Blackpool.—Blackpool Co-operative Society, Ltd., proposing model dairy and buildings in George-st.—Site acquired adjoining Whinney Heys Hall for hospital, at £100,000.

Blackpool.—C.B. resolved application to M.T. for £3,700, construction steel-framed building at tramway depot.—Subject to Aerodrome Committee providing site new transformer sub-station be erected at Aerodrome, and Borough Electrical Engineer instructed to invite tenders.—Tramway manager submitted preliminary plan of proposed tramway shelter at Cleveleys prepared by B.S.—B.S. instructed to prepare plans for ambulance shed.—Site, extension to Sanatorium been inspected.—Sketch plan submitted from J. England for shops on land at corner of Queens-drive and Red Bank-rd. and showing shops fronting to Queens-drive, been approved.—Plans passed:—Re-building premises, 87/89, Promenade, Sir L. Parkinson & Co., Ltd.; 14 houses, Arkholme-av., Pye Bros.; 7 houses, Duchess-drive, T. Bannister & Sons; 8 houses, Raymond-av., R. Fielding & Son; 8 houses, Whitegate-drive, J. E. Dugdale; 15 houses, Park-rd., Fletcher & Murdock; 17 houses, Dudley-rd., R. Fielding & Son.

Bolton.—Housing Committee acquired site off Hamilton-st., Astley Bridge, for 60 to 70 houses. Plans by B.E.—W. Johnson & Sons, 27, Oldham-rd., Miles Platting, Manchester, architects, alterations, Swan Hotel, Bradshawgate, for Wilsons Brewery, Ltd.

Bournemouth.—Dramatic and Orchestral Club acquired site, Hinton-rd., for theatre. Building will hold nearly 6,000. Cost, £16,000. Plans by Seal & Hardy, Bournemouth.—S.R. to shortly close goods' shed in order to extend Bournemouth West station buildings. Architect, J. R. Scott, A.R.I.B.A., Waterloo Station, S.E.1.

Brighton.—T.C. adopted three important improvement schemes involving altogether £500,000. Black Rock to Rottingdean sea defence works; Fish Market to Aquarium widening of Front, and improvement of esplanade at bottom of West-st. combined with provision of two bonting pools on beach.

Bristol.—Holbrow & Oaten preparing plans two-department school, 400 senior boys and 400 senior girls on two-acre site, junction of Portway and Park-rd.

Bromley.—British Legion acquired site for club-house and hall. Plans by Henry Parker & Co., 153, Cheapside, E.C.2.

Burnley.—T.C. approved:—Shops and offices in Curzon-st., J. Duckett & Sons, Ltd.; Radium Treatment Rooms, Victoria Hospital, Board of Management; 6 houses, Dorset-st., W. Fisher & Sons.

Cardiff.—J. Goldie, 3, Central-buildings, 7, Victoria-st., London, S.W.1, architect for Church of St. Patrick's, Grangetown, for Rev. F. H. Garrett.

Carlisle.—Plans passed:—H. E. Scarborough, for Cumberland Infirmary, new pathological institution; Carr & Co., new offices in Caldewgate; two pairs of houses, Dalston-rd., for A. Hoodless.

Charminster.—Preliminary designs prepared for Church of St. Francis. Architect is J. H. Gibbons, F.R.I.B.A., 543, Abbey House, Victoria-st., S.W.1.

Cheltenham.—T.C. approved:—B.G., new nurses' home, The Workhouse, Swindon-rd.; Corporation, 34 houses, Kipley and Shelley-rds.; Corporation, electricity sub-station, The Lypiatts, Lansdown-rd.

Clacton-on-Sea.—Concert hall, hold about 750, in Pier-av. Architect, W. H. Wrighton, Victoria-chams.

Claypole.—Plans considered for rebuilding church schools, Rev. W. H. Langworthy.

Croom.—Limerick C.C. approved £2,500 for residence for Medical Officer at Co. Hospital.

Dagenham.—S. to prepare plans, open-air swimming bath and paddling pool, for U.D.C.

Darfield.—Miners' Welfare Committee propose pit-head baths at Houghton Main Colliery.

Doncaster.—T.C. approved:—12 houses, Holyrood-rd., for Mr. Lockwood.

Dorchester.—R.D.C. made application to M.H. sanction £7,650 for 4 houses, Stratton; 4, Grimstone; 8 at Winterborne St. Martin.

Durham.—City Council decided purchase site at Whinney Hill for central school.

Easington.—R.D.C. approved houses as follows:—Horden, 18; Murton, 22; New Seaham, 14; Easington, 20; and Trimdon, 10.

East Grinstead.—Plans prepared for parish hall. Architects, J. D. Clarke & Worsfield, of 25, Hyde-gardens, Eastbourne.

Eccles.—T.C. approved:—Brown & Heyes, motor garages, proposed sides of semi-detached houses in course erection in Westminster-rd. and Chatsworth-rd., Ellesmere Park; J. Locke, 10 semi-detached houses, Trevelyan-st.

Essex.—C.C. sanction £215,000 road reconstruction schemes.

Finchley.—U.D.C. approved:—9 garages, Westway and Fursby-av., P. D. Walker; 6 houses, Hillrise, G. C. Swanson; 4 houses, Hill-top, G. C. Swanson; 8 flats, Neale-close, Hampstead Garden Suburb, Hampstead Tenants, Ltd.

Frodsham.—Joint Water Committee acquire site, Beacon Hill, for reservoir, at £5,000.

Gloucester.—Bishop of Gloucester issued instructions for plans for new churches erected under New Churches Fund First edifice be in Finley-rd. and plans for church and parsonage entrusted to W. H. R. Blacking, L.R.I.B.A., Ladymead, Guildford.

Gosport—Another £24,000 expended upon reconstruction premises at Submarine Depot. Plans are Admiralty, Whitehall.

Greenlaw.—Middle District Committee of Berwickshire C.C. approved plans for widening West Bridge over Blackadder, at £850.

Halifax.—T.C. propose secondary school at Craven Lodge.

Hove.—T.C. approved:—S. Clough, architect, for Ice Rink, Ltd., ice rink, Denmark Villas; F. Brooksbank, 6 houses and 5 garages, Welbeck-av.

Irlam.—M.H. given approval to additional 50 houses on Lord's-street site, for U.D.C.

Keighley.—T.C. approved:—14 houses, Broomhill-av. and Exley-rd., for Hird Bros. & Co.; church, Queen's-rd., for Rev. Provost J. F. Russell; 16 houses, Sunny Hill-av., J. W Midgley.

Keighley.—A. P. Harrison, architect, High-close, Highfield-lane, preparing scheme for almshouses.

Keighley.—T.C. approved:—Church, Queen's-rd., Rev. Provost J. F. Russell; alterations, off Hard Ings-rd., for Victoria Park Mills, Ltd.; 16 houses, Sunny Hill-av., Wm. Midgley; 4 houses, Hog Holes-lane, Wm. Kelly; 14 houses, Broomhill and Exley-rd., Hird Bros. & Co.

Kirriemuir.—T.C. agreed to estimates of £2,045, Sir James Barrie's sports pavilion on Hill of Kirriemuir.

Leeds.—Tenders being invited for shops in Samuel-street for M. Goldstone. Plans by J. S. Wright & Clay.—St. Edmund's Church Council has decided to go forward with completion of building scheme, at £12,000.

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TANGENT WORKS, BARKING, ESSEX.

Leeds.—T.C. approved:—W. E. Batty & Co., 10 semi-detached houses, Stonegate-rd., Meanwood; J. W. Haigh, 1 detached and 12 semi-detached houses, Parkland-drive and Stonegate-rd., Meanwood; J. W. Haigh, 26 semi-detached houses, Stonegate-rd. and Parkland-crescent, Meanwood.

Leek.—Scheme under consideration by Parochial Church Council of St. Luke's for schools and parochial hall. Vicar, Rev. J. G. Halpen. No architect yet appointed.

Limerick.—T.C. is seeking sanction £3,000 for extensions at Municipal Institute.

Liverpool.—T.C. recommend borrowing £70,000, purchase from Marquess of Salisbury land adjoining Score-lane and Childwall-rd., Wavertree, for housing.—Subject sanction, Dovecot Estate be transferred to Housing Committee for housing purposes, at £26,500.—Application be made to Ministry for £6,307 respect conversion of "Underlea," Aigburth, into open-air day special school.—Site already transferred to E.C. for school in Ellergreen-rd., Norris Green Estate, be increased by addition of land, Carr-lane.—M.H. forward formal sanctions of £17,930 for erection and equipment of baths and washhouses in Melrose-rd.—Ministry sanctioned £750, patients' canteen and rabbitry buildings for Fazakerley Sanatorium.

London (Tooting).—M.A.B. asked M.H. sanction provision of isolation accommodation at £2,525 to £3,450, at Mental Hospital.—Cold storage chamber with cooling plant at Fountain Mental Hospital at £300 also to be provided.

London.—M.A.B. received sanction reconstruction of the fireplaces at S. Luke's Hospital at £200.

London (Lambeth).—B.C. spend £1,370 on improvements at Knight's Hill Playing Field.

London (Woolwich).—B.C. passed:—Eley & Allen, 83 Powis-st., Woolwich (on behalf of C. & D. J. Barwell, Belmont estate, Eltham, 50 houses; Eagle Bros., 186, Burnt Ash Hill, Lee, S.E.12, Cadwallon-rd., Eltham, 6 houses; H. Smith & Co., 59, Easthill, Dartford, Avery Hill-rd., Eltham, 8 houses; Smith's Motor Engineering and Coach Works, Ltd. (per G. F. Butler), 144a, Eltham High-st., Eltham. Eltham High-st., shops and offices with arcade.

Manchester.—Midgeley & Sons, estate agent, 16, Deansgate, proposing warehouse, Crown-st., Danzick-st. and Factory-st. Plans by J. H. Fletcher, architect, "Falconhurst," Little Orme, Llandudno.

Manchester.—J. & N. Phillips, Ltd., Church-st., acquired site, Bennett-st., Oldham-rd., Goulden-st. and Chadderton-st., New Cross, for garage. Plans by J. W. Beaumont & Sons, FF.R.I.B.A., architects, 24, Brazennose-st.—R. Martin, F.M.S.A., 30, Deansgate, architect for premises for Christian Scientists' Church, Mosley-rd., Levenshulme.

Newcastle-under-Lyne.—Plans passed: 2 pairs of semi-detached houses, Seabridge-rd., S. Heath & Son; Butcher Department, London-rd., Silverdale Equitable Industrial Co-operative Society; alterations to shop premises, 21, High-st., Home and Colonial Stores, Ltd.; public-house, Liverpool-rd., Parkers (Burslem) Brewery, Ltd.

Northampton.—C.B. inviting tenders for 40 houses, St. David's-rd.

Nottingham.—City Council proposing 46 additional houses on Windmill-lane estate, at £19,044.

Oldham.—T.C. approved:—F. Thompson, 16 houses, Tunstall-rd. and Kingsley-rd.; R. Whitehead, 5 shops, Oak-rd.

Ossett.—T.C. approved 6 houses, Kingsway, for Kingsway Estate Constructing Co.

Portadown.—U.D.C. borrow £46,000 for main drainage scheme.

Portsmouth.—T.C. approved:—J. May, 32 houses, Shelford-rd.; George Gale & Co., Ltd., additions, 18, Osborne-rd.; V. Dye, 17 houses, Compton and Randolph-rds.; J. C. Nicholls, 6 houses, Brecon-av., Cosham; S. A. Evans, 6 houses, Selsey-av.; Portsmouth and Brighton Breweries, Ltd., public-house, Meon and Crofton-rds.; M. Jones, business premises, The Spur-rd., Cosham; G. Coleman, 15 houses, Madeira-rd.; McCarthy Bros., 20 houses, Stride-rd.

Preston.—Parochial Council of St. Luke's Church acquired site for hall. No architect yet appointed.

Richmond (Yorks).—Plans by R.D.C.:—Presbyterian church at Catterick Camp; premises for Co-operative Society at Catterick.

Romford.—Appeal being made for completion of Church of St. John the Divine. W. D. Caroe, F.R.I.B.A., architect, 3, Gt. College-st., Westminster, S.W.1.

Rotherham.—J. E. Knight, 48, Moorgate, architect for out-patients' department at hospital, at £20,000.

Rotherham.—T.C. approved:—Vicar and Church Council of St. Paul's Church, Kimberworth-rd., proposed parsonage house.

Saltburn.—Saltburn pier, which is owned by Middlesbrough Estate Co., is to be repaired and dancing hall is to be erected upon.

Scunthorpe.—U.D.C. instructed engineer and surveyor prepare scheme enlarging Market Hall, and alternative plan for building of two-story building next to present premises.

Sheffield.—T.C. approved: 16 houses, Greystones-drive, A. J. Belton; 12 houses, Strnan-rd., Plant Bros., 6 houses and 7 w.c.'s, Mandeville-st., C. Wagelein; 6 houses and 5 saleshops, West-st. and Carver-lane, Coalition Syndicate, Ltd.; 14 houses, Chesterfield-rd., Trustees of Douglas Haig Memorial Homes; 103 houses, Wisewood estate, Corporation; 6 houses, Renshaw-rd., J. Ramsden; 6 houses, Retford-rd., W. & E. Sadler, Ltd.; 20 houses, Delph House-rd., Simpson Bros.

* See also our List of Contracts, Competitions, etc.

Sheffield.—Sheffield and Ecclesall Co-operative Society, Ltd., erect branch in Greenfield-rd. and propose to carry out alterations to existing Dyke-st. stores.—B.G. had plans prepared for improving casual ward accommodation, at £7,000.—Yorkshire Baptist Association purchased site on Prince of Wales-rd., Manor estate, for Baptist Church. Plans by F. Wills, L.R.I.B.A., architect, Algitha-rd., Skegness, who is associated with John Wills & Sons, architects, Derby.

Sidmouth.—Tender of £3,300 for demolition of old market buildings and erection of modern structure approved by Council.

Smethwick.—C.B. approved:—25 houses, Dibble estate, for Excelda Housing Society, Ltd.

Southport.—Directors of the Ganmont Graphic Pictures, Ltd., decided to commence rebuilding Palladium, Lord-st. Estimated cost £100,000.

South Mimms.—Plans by R.D.C.:—8 bungalows, Manor-rd., Potters Bar, for — Hicks, builder, Potters Bar.

Spenborough.—Plans by Chippendale & Edmondson, of Bradford, for offices and warehouse at Flush Mills, for T. F. Firth & Sons, Ltd.

Sunbury.—U.D.C. propose further 32 houses, Layton's-lane.

Surbiton.—U.D.C. approved:—18 shops, Red Lion-rd., J. Cronk & Sons; garage and petrol-filling station, Ewell-rd., R. J. Minty; 5 houses, Berrylands-rd., W. H. Whitehead & Co.

Sutton Coldfield.—Plans passed. 6 houses Britwell-rd., Mrs. H. E. Foster; 16 houses, Cottage and Peddimore-lanes, for Birmingham Tame and Rea District Drainage Board; 11 houses, Rectory-rd., Davis & Sons; 6 houses, Walmley-rd., A. P. Johnson.

Thorne (Yorks).—T. H. Johnson, 20, Priory-place, Doncaster, architect for billiards saloon to accommodate 16 tables, at Moorends, at £4,000.

Thornton Cleveleys.—A. England, Carlton-chams., St. Annes-on-Sea, preparing plans church Buildings and school, Victoria-rd., for Cleveleys Science Society.

Wallasey.—Council inviting tenders for erection at Reed's-lane end of Leasowe-rd. estate 110 houses for tenant-ownership and 170 houses and 48 bed-room flats for letting.

Walthamstow.—U.D.C. approved: 14 houses, Sheridan-rd. and Sunnydene-av., West Bros. & Pettet; 36 houses, Chingford-rd., J. W. Lohden; 12 houses, Avon-rd. and Fyfield-rd., J. & J. Dean; 4 houses, shop dwelling and store, Chingford-rd., E. W. Baker.

Wealdstone.—Wealdstone Brotherhood acquired site for hall. J. Piggott, architect, 66, Spencer-rd.

Weybridge.—Alterations and additions to Constitutional Club buildings. Architect, P. J. Westwood, F.R.I.B.A., 14., Buckingham-st., Adelphi W.C.2.

Wigston.—Council accepted £37,000 tender for housing scheme on Aylestone-lane.

Willesden.—U.D.C. approved:—54 houses and garages, Pearce & Taylor, Fleetwood-rd., Dollis Hill; 12 houses, West Way, Neasden, F. Cattran; 6 houses, Dollis Hill-lane, by Rotherham Estates Co.; shops at High-st., Harlesden, shops and flats at Edgware-rd., garage and showroom, 151, High-st., 28 houses and garages and 58 houses, Brook-rd., Nutfield-rd. and Rylands-rd., — Costain.

Winchester.—T.C. considered plans by Trustees of St. John's Hospital, showing access from Weirs by means of steps to Trustees' property in Mantle-lane on which they proposed to erect new St. Mary Magdalen Almshouses.

Wolviston (Co. Durham).—Stockton R.D.C. approved plans for 38 semi-detached houses by T. Duffy.

York.—B.E. approved plans, first portion Tang Hall senior school for boys and girls, at £9,804.—Managers, Heworth School, submitted plans for extensions.

York.—City E. submitted sketch plans for two-roomed tenements for Nursaw Estate, and committee recommend erection of 2 blocks of 8 tenements.

York.—T.C. approved: Montague Burton, Ltd., additions, 27, Coney-st and 37, Market-st.; J. Smith's Tadcaster Brewery Co., Ltd., public-house, Mail Coach Inn, St. Sampson's-square; Y.W.C.A., additions, Central Hostel, Micklegate; C. Walker, 12 houses, Millfield-lane; W. E. Puckering & Co., 14 houses, Winchester-av.

REFERENCE BOOKS

Municipal Year Book, 1929.

The uses and indispensability of the Municipal Year Book are too well known to municipal authorities and their servants, to public works contractors, builders, and builders' merchants to require eulogy. It is therefore more fitting to confine ourselves—in noticing the publication of the 1929 edition issued by the Municipal Journal, Ltd., Sardinia House, W.C.2, price 21s., post free—to a short recital of its contents and their arrangement. Mr. Neville Chamberlain, Minister of Health, contributes a valuable preface, while the subject of "The Ministry of Transport in Relation to Local Authorities" is dealt with in a foreword by Lt.-Col. Rt. Hon. Wilfrid Ashley, M.P., Minister of Transport. The book's scope is widened by the inclusion of information with regard to the public utility services of a kind which has not hitherto been brought together in one volume. For several years, by a series of tables, exclusive in character, and by the skilful presentation of statistics, it has been possible to ascertain the position of the municipal gas and electricity undertakings, tramways, light railways, motor-omnibuses, waterworks, docks, and harbours. Complete information is given as to their capital, revenue, expenditure, profits, charges, outgoings in rates, relief, etc. The new 1929 edition contains similar and complete information in regard to the undertakings of limited liability companies responsible for public utility supplies and services, and therefore performing public functions in intimate association with local authorities.

All the usual features are preserved. Thus the volume summarises the work of the municipal corporations, the county councils, and all other local governing bodies. The names and addresses of the councillors and officers of many hundred authorities are given. A series of tables reveal the present state of municipal trading and the multiform services which are undertaken by British, Scottish, and Irish local governing authorities. Lists of areas served by companies make a valuable new feature, while the volume contains a complete record of all the larger gas, electricity, and tramway companies. It also includes the only full list of water companies available in this country. Another new feature provides extensive information on hospital accommodation. The review of new legislation, the summary of local goverment in 1928, and the presentation of important matter dealing with Mr. Chamberlain's Local Government Act, complete what is probably the most extensive information on local government ever brought within a single volume.

Kinematograph Year Book, 1929.

Issued by Kinematograph Publications, Ltd., 93, Long Acre, W.C., at 10s., this directory contains in its equipment and technical section information of the highest value to architects, builders, and specialists engaged in erecting or altering picture-houses. We learn that the American Trade Commissioner in Europe pointed out, as long as a year ago, that Gt. Britain has done more in the way of large theatre construction than any other country in Europe. The cinema building boom which started three years ago has not abated. In London and the provinces there are in operation schemes for the provision of new theatres upon a scale hitherto unknown in this country. London schemes, says the Year Book, are particularly prolific. So much so that competent observers foresee at no very distant date the overseating of the Metropolis. The trend of cinema designs is towards the "atmospheric," or, at least, the "semi-atmospheric." This is an annual which should be on every cinema architect's reference shelf.

TRADE NEWS

Modern Telephone Exchange Construction.

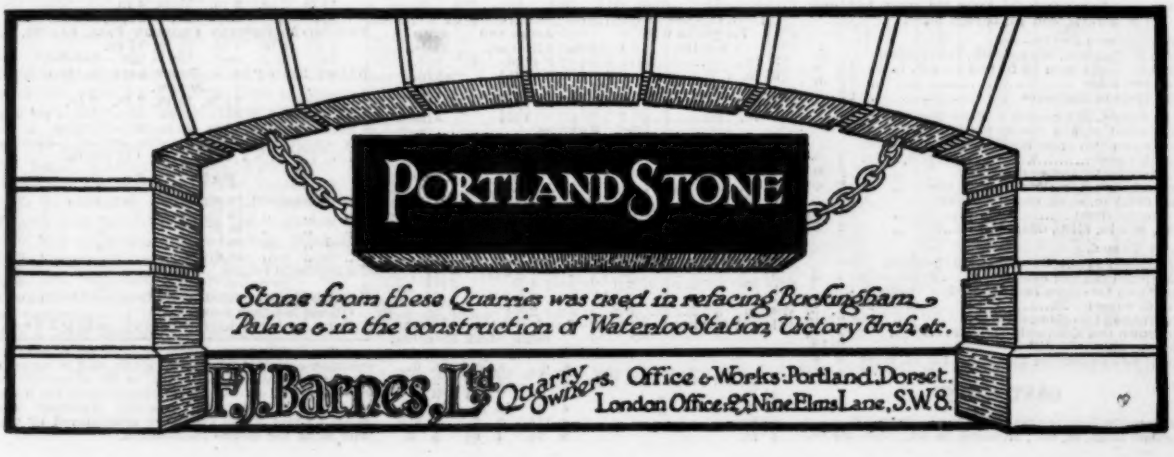
The rapid development which has taken place in the use of the telephone in recent years has necessitated the building of new exchanges in a great number of towns throughout the country. The buildings, which have all been designed by H.M. Office of Works, are uniformly excellent in architectural character. Most of the new buildings are steel framed. The largest exchange which is nearing completion at present is the new automatic telephone exchange at Salford, Lancashire, in which approximately 4,000 tons of steelwork have been used. This building is of ten stories, and covers approximately 5½ acres of floor space, the height over all from the foundations being 162 ft. The steelwork sub-contract for this building has been carried out by Messrs. Edward Wood & Co., Ltd., of Ocean Ironworks, Manchester, constructional engineers, for Messrs. J. Gerrard & Sons, Ltd., building contractors. Messrs. Edward Wood & Co., Ltd., are at the moment supplying many thousands of tons of steelwork for telephone exchanges in various parts of the country for contractors to H.M. Office of Works. We are informed that the company has developed a special department to deal exclusively with steelwork for building contracts under the control of H.M. Office of Works. In addition to the exchange completed at Salford, recent works include exchanges at Stockport, Longton, Wandsworth, Mitcham, Loughton, Wigan, St. Helens, Folkestone, Basingstoke, etc., and post offices at Crewe, Morecambe, Oxford, Farnborough, Birmingham, etc.

New Cemetery Chapels, Camberwell.

The sub-contractors for this work, illustrated this week, are as follows:—Messrs. Richard Anderson and Co., lightning conductor; the Crittall Manufacturing Co., Ltd., steel sashes; Dent and Hellyer, sanitary fittings; Thomas Faldo and Co. (Val de Travers Asphalte Co.), asphalt work; J. Jeffreys and Co., heating installation; Redpath, Brown and Co., Ltd., steelwork; J. R. Pearson (Birmingham), Ltd., weather vane; Galbraith Bros., Ltd., Portland and Bargate stone work.

Sir Aston Webb and Son are the architects.

[It should be noted that there are two chapels—not one, as stated on our inset plate.]


PORTLAND STONE
Stone from these Quarries was used in refacing Buckingham Palace & in the construction of Waterloo Station, Victory Arch, etc.
F.J. Barnes, Ltd. Quarry Owners. Office & Works: Portland, Dorset.
London Office: 21, Nine Elms Lane, S.W.8.

PRICES CURRENT OF MATERIALS.*

Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 5 6
Second Hard Stocks	3 19 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Flettons, at	2 12 3	Best Blue Pressed Staffs	9 5 0
King's Cross Do., grooved for Plaster ...	2 14 3	Do. Bullnose ...	9 15 0
Do., Bullnose...	3 7 3	Blue Wire Cuts	7 5 0

Best Stourbridge Fire Brick :—
2½ in. ..... 8 11 0 3 in. 10 3 0

Glazed Bricks—

Best White Ivory, and Salt Glazed Stretchers ...	21 0 0	D'ble Str'tch'rs	29 10 0
		D'ble Headers...	26 10 0
		One Side and two Ends ...	30 10 0
Headers	20 10 0	Two Sides and one End	31 10 0
Quoins, Bullnose and 4½ in. Flats	27 10 0	Splays, and Squints	28 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours. Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS

Delivered London

	s. d.		s. d.
2 in. per yd. super.	1 11	3 in per yd. super	2 9
2½ in. ,, ,,	2 4	4 in. ,, ,,	3 6

	s. d.	
Thames Ballast	9 9 per yd.	delivered 2 miles radius Paddington.
Pit Sand	12 0 ,, ,,	
Thames Sand	12 6 ,, ,,	
Best Washed Sand.....	12 6 ,, ,,	
¾ in. Shingle for Ferro-Concrete	12 0 ,, ,,	
¼ in. ,, ,, ...	12 6 ,, ,,	
¾ in. Broken Brick.....	11 6 ,, ,,	
Pan Breeze	8 0 ,, ,,	

Per ton delivered in London area in full van loads.
Best Portland Cement. British.
Standard Specification. Test £2 6 0 to £2 8 0 30s. alongside at Vauxhall in 80-ton lots.

	£ s. d.
Ferrocrete per ton extra on above	0 7 6
Super Cement (Waterproof)	3 16 0
Roman Cement	8 15 0
Parian Cement.....	5 15 0
Keene's Cement, White	5 15 0
,, ,, Pink.....	5 10 0
Plaster, Coarse, Pink	3 0 0
,, ,, White	3 12 6
,, Fine	5 12 0
Straplte, Coarse	3 9 0
,, Finish	3 17 0
Grey Stone Lime.....	2 10 9
Chalk Lime	2 10 9
Best Ground Blue Lias Lime	1 17 6
Hair ..... per cwt.	2 2 6
Granite Chippings	1 12 0

Note.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months carr. pd.
Stourbridge Fireclay in s'cks 37s. 0d. per ton at rly. dp.

STONE.

	s. d.
Bath Stone.—Delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube.....	2 10
Beer Stone—Random Block— Free on rail at Seaton Station per ft. cube	2 3
Delivered free on rail Nine Elms, S.R. per ft. cube	3 1½
Selected approximate size one way, 1d. per cubic foot extra; selected approximately three sizes or for special work, 3d. per cubic foot extra.	
Portland Stone.— Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, S. Rly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube.....	4 4½
Do. do. delivered on road wagons at above stations, per ft. cube.....	4 5½
White basebed, 3d. per ft. cube extra.	
Note.—1d. per ft. cube extra for every foot over 20 ft *average*, and ½d. beyond 30 ft.	
Hopton-Wood Stone.— F.O.R. Quarries, Wirksworth, Derbyshire,	s. d.
Random blocks from 10 ft. and over P. ft. cb.	14 0
Sawn two sides ..... ,,	22 6
Sawn three or four sides ..... ,,	27 6
York Stone, Blue—*Rob n Hood Quality.* Delivered at any Goods Station, London.	
6 in. sawn two sides landings to sizes (under 30 ft. super).....Per ft. super	5 6
6 in. rubbed two sides, ditto.. ..... ,,	6 0
3 in. sawn two sides slabs (random sizes) ,,	2 3½
2 in. to 2½ in. sawn one side slabs random sizes) ..... ,,	1 6½
1½ in. to 2 in. ditto, ditto ..... ,,	1 3½
Hard York— Delivered at any Goods Station, London, Scappled random blocks ..... Per ft. cube	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super) ..... Per ft. super	5 1½
6 in. rubbed two sides, ditto ..... ,,	6 1½
4 in. sawn two sides slabs (random sizes) ,,	2 1½
3 in. ditto ditto ,,	2 10
2 in. self-faced random flags.....Per yd. super	3 6

CAST STONE.

Delivered in London area in full van loads, per ft. cube : Plain, 8s. 6d. ; Moulded, 9s. 6d. ; Cills, 10s.0d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£30 0	3 × 6	£21 0
4 × 9	26 0	3 × 11	25 0
4 × 8	25 0	2 × 11	26 0
4 × 7	23 0	3 × 9	24 0
3 × 8	22 0	2½ × 9	24 0
3 × 7	22 0	3 × 4½	21 0
2½ × 7	21 0	3 × 4	21 0

PLANED BOARDS.

1 × 11	£30 0	1 × 9	£28 0

PLAIN EDGE FLOORING

Inches.	per sq.	Inches.	per sq.
⅝.....	18/-	1½.....	30/-
¾.....	21/-	1½.....	34/-
1	24/-		

TONGUED AND GROOVED FLOORING

Inches.	per sq.
1	24/-
1¼.....	30/-
1½.....	34/-

Ins. BATTENS.	s. d.
⅝ x 2.....per 100 ft.	2 8

MATCHING (BEST).

Inches.	per sq.
⅝.....	16/6
¾.....	19/-
1	24/-

SAWN LATHS.

	s. d.
Per bundle	2 6

1" AND UP THICK.

	£ s. d.	£ s. d.
Dry Austrian Wainscot, per ft. cube	0 16 0	to 0 18 0
Dry American and/or Japanese Figured Oak, ft. cube.....	0 14 0	to 0 15 0
Dry American and/or Japanese Plain Oak, ft. cube	0 10 0	to 0 13 0
Dry Log edged Honduras Mahogany, ft. cube.....	0 15 0	to 0 18 0
Dry Log cut Honduras Mahogany, ft. cube.....	0 16 0	to 1 1 0
Dry Cuba Mahogany, ft. cube...	1 1 0	to 1 10 0
Dry Teak, ft. cube	0 13 0	to 0 15 0
Dry American Whitewood, ft. cube	0 10 0	to 0 14 0
Best Scotch Glue, per cwt.	4 10 0	to —
Liquid Glue, per cwt.	4 7 0	to 5 10 0

SLATES

First quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000.

	£ s. d.		£ s. d.
24 by 12	32 18 4	18 by 10	18 12 11
22 by 12	29 17 11	18 by 9	16 9 2
22 by 11	27 14 2	16 by 10	15 12 6
20 by 12	26 5 0	16 by 8	12 3 9
20 by 10	22 10 0		

TILES.

Delivered at London rate stations in full truckloads of not less than 6 tons. Per 1,000. f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district.....	5 7 6
ditto hand-made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) { Hand-made	0 9 6
{ Machine-made	0 9 0

METALS.

Joists, Girders, &c., to London Station, per Ton—

	£ s. d.
R.S. Joists, cut and fitted	12 10 0
Plain Compound Girders	14 10 0
,, Stanchions	16 10 0
In Roof Work	19 10 0

Mild Steel Rounds.—To London Station, per ton

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	12 0 0	⅝ in. to ½ in.	10 15 0
⅜ in.	11 0 0	⅝ in. to 2½ in.	10 10 0

Wrought-Iron Tubes and Fittings—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward, if sent from London Stocks.)

	Tubes. Wrought Mild Steel.	Tubes. Genuine Staffs. Iron.	Fittings. ½ in. and under.	Fittings. Over ½ in.	Flanges. ½ in. and under.	Flanges. Over ½ in.
	%	%	%	%	%	%
Gas	67½	50	42½	45	52½	55
Water	63½	46½	37½	40	47½	50
Steam	60	42½	32½	35	42½	45
Galv. gas.....	55	37½	32½	35	42½	45
Galv. water	50	32½	27½	30	37½	40
Galv. steam	45	27½	22½	25	32½	35

C.I.—Half-Round Gutters—London Prices ex Works

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/3½	11¾d.	3¾d.
3½ in.	1/4½	1/1½	3¾d.
4 in.	1/6	1/3	3¾d.
4½ in.	1/7½	1/4½	4½d.
5 in.	1/10½	1/6½	5½d.

O.G. Gutters.

3 in.	1/8	1/4½	3¾d.
3½ in.	1/8	1/4½	3¾d.
4 in.	1/9½	1/4½	3¾d.
4½ in.	1/11½	1/7½	4½d.
5 in.	2/4½	1/10½	5½d.

Rain-water Pipes, &c.

Per yd. in 6 ft.	Pipe.	Bends, stock Branches, angles.	Bends, stock Branches, stock angles.
2 in. plain	1/10½	1/3	1/9½
2½ in. ,, ...	2/0½	1/4½	2/1½
3 in. ,, ...	2/6	1/9	2/7½
3½ in.	2/11½	2/0½	3/0½
4 in. ,, ...	3/5	2/6½	3/8½

L.C.C. Coated Soil Pipes—London Prices ex Works.

	Bends, stock Branches, Pipe. angles.	Bends, stock Branches, stock angles.
	s. d. s. d.	s. d.
2 in. per yd. in 6 fts. plain	3 3 2 4½	2 10
2½ in. ,,	3 9 2 7½	3 7
3 in. ,,	4 6 2 10	4 2½
3½ in. ,,	4 11½ 3 7	4 11½
4 in.	5 5½ 4 0½	5 9

L.C.C. Coated Drain Pipes—London Price sex Works

	Bends, stock Branches, Pipe, angles, stock angles.		
	s. d.	s. d.	s. d.
3 in. per yd. in 9ft. lengths	4 4	5 1	8 0½
4 in. ,, ,,	4 10	5 8	10 0
5 in. ,, ,,	6 6	10 10	17 1
6 in. ,, ,,	6 8	13 2	21 9

Gasken for jointing, 38/6 per cwt.

Per ton in London.

Iron—	£ s. d.		£ s. d.
Common bars.....	11 0 0	to	12 0 0
Staffordshire Crown Bars—Good merchant quality	11 10 0	to	12 10 0
Staffordshire Marked Bars.....	14 0 0	...	15 0 0
Mild Steel Bars	10 0 0	...	11 0 0
Steel Bars, Ferro-Concrete quality, basis price	10 0 0	...	11 0 0
Hoop iron, basis price	11 10 0	...	12 10 0
,, Galvanised	27 0 0	...	28 0 0
Soft Steel Sheets, Black— Ordinary sizes, to 20 g....	13 0 0	...	14 0 0
,, ,, ,, 24 g....	14 0 0	...	15 0 0
,, ,, ,, 26 g....	16 0 0	...	17 0 0
Sheets Flat Best Soft Steel, C.R. and C.A quality— Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	15 0 0	...	16 0 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.....	16 0 0	...	17 0 0
Ordinary sizes, 6 ft. by to 3 ft. to 26 g....	18 0 0	...	20 0 0
No. 1 quality £4 per ton extra.			
Flat and Galvanised Corrugated Sheets— Ordinary sizes, 6 ft. to 9 ft. to 20 g.	16 10 0	...	17 0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	17 0 0	...	18 0 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	20 0 0	...	21 0 0
Sheets Galvanised Flat, Best quality— Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	21 0 0	...	22 0 0
Best Soft Steel Sheets, 22 g. and 24 g.	23 0 0	...	25 0 0
Best Soft Steel Sheets, 26 g.	24 10 0	...	25 10 0
Cut Nails, 3 in. to 6 in.....	1s 0 0		
(Under 3 in. usual trade extras.)			

Metal Windows.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)	£ s. d.
Lead—Sheet, English, 4 lb. and up	34 0 0
Pipe in coils	34 10 0
Soil pipe	37 10 0
Compo pipe	38 10 0

Note.—Country delivery, 20s. per ton extra; lots under 3 cwt. 3s. per cwt. extra, and over 3 cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 5s. cwt. extra.

Old lead, ex London area, at Mills ..... per ton	22 10 0	

COPPER.

		s. d.
Seamless Copper tubes (basis).....	per lb.	1 1½
Strong sheet	,,	1 0
Thin.....	,,	1 1
Copper nails	,,	2 3
Copper wire	,,	2 4

PLUMBERS' BRASS WORK.

Delivered in London.

New River Pattern Screw Down Bib Cocks for Iron.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/-	45/-	76/-	153/-	246/-	510/- per doz.

New River Pattern Screw Down Stop Cocks and Unions.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/- per doz.

River Pattern Screw Down Main Ferrules.

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per doz.

Caps and Screws.

1¼ in.	1½ in.	2 in.	3 in.	4 in.
7/6	10/-	14/-	23/-	30/- 42/- per doz.

Double Nut Boiler Screws.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
7/6	11/-	17/-	29/-	36/-	63/- per doz.

Brass Sleeves.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per doz.

New River Pattern Croydon Ball Valves, S.F.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
35/-	56/-	98/-	162/-	228/- per doz.

Drawn Lead P. & S. Traps with Brass Cleaning Screw.

1½ in.	1½ in.	2 in.	3 in.
8 lbs. P. traps ...	33/-	41/-	56/- 101/- per doz.
8 lbs. S. traps ...	35/-	45/-	66/- 126/- ,,

Tin.—English Ingots, 2/6 per lb. Solder.—Plumber's 1/1. Tinmen's 1/4, Blowpipe 1/5 per lb.

PAINTS, &c.

			s. d.
Raw Linseed Oil, in pipes	per gallon		0 2 9
,, ,, ,, in barrels ...	,,		0 2 11
,, ,, ,, in drums	,,		0 3 1
Boiled ,, ,, in barrels ...	,,		0 3 1
,, ,, ,, in drums	,,		0 3 4
Turpentine in barrels	,,		0 3 11
,, in drums (10 gals)	,,		0 4 1
Genuine Ground English White Lead, per ton			55 0 0

(In not less than 5-cwt. casks.)
Extra for 1-cwt. kegs over 5-cwt. casks is 5/9 cwt.

* The information given on this page has been specially compiled for The Builder, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS (*contd.*)

PAINTS, &c. (*contd.*)

GENUINE WHITE LEAD PAINT.

		£	s.	d.
"Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Morganswyte," "Polacco," "J." Brand, and other best brands (in 14 lb. tins) not less than 5 cwt. lots ..	per ton delivered	73	10	0
Red Lead, Dry (packages extra) ..	per ton	39	0	0
Best Linseed Oil Putty	per cwt.	0	15	0
Filicol	"	0	15	6
Size. XD quality	firkn.	0	3	6

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per ft.		Per ft.
15 oz. fourths ..	2½d.	32 oz. fourths	6½d.
15 ,, thirds ..	3½d.	32 ,, thirds	8½d.
21 ,, fourths ..	3½d.	Obscured Sheet, 15 oz.	3½d.
21 ,, thirds ..	4d.	,, ,, 21 ,,	4½d.
26 ,, fourths ..	4d.	Fluted, 15oz. 6½d., 21oz.	9d.
26 ,, thirds ..	6½d.	En'lled, 15oz. 4½d., 21 oz.	6d

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED plate in CRATES OF STOCK SIZES.

	Per ft.
¼ Rolled plate	4½d.
⅜ Rough rolled	5½d.
½ Rough rolled	5½d.
Figured Rolled, Baltic, Oceanic, Arcade Stippolyte, and small and large Flemish White ..	5½d.
Ditto, tinted	8½d.
Rolled Sheet	4½d.
White Rolled Cathedral	4½d.
Tinted do.	6½d.

Cast plate is same price as rough rolled.

VARNISHES, &c.

		Per Gallon. £	s.	d.
Oak Varnish	Outside	0	14	0
Fine ditto	ditto	0	16	0
Fine Copal	ditto	0	18	0
Pale Copal	ditto	1	0	0
Pale Copal Carriage	ditto	1	4	0
Best ditto	ditto	1	12	0
Floor Varnish	Inside	0	18	0
Fine Pale Paper	ditto	0	18	0
Fine Copal Cabinet	ditto	1	2	6
Fine Copal Flatting	ditto	1	0	6
Hard Drying Oak	ditto	0	18	0
Fine Hard Drying Oak	ditto	0	19	0
Fine Copal Varnish	ditto	1	0	0
Pale ditto	ditto	1	2	0
Best ditto	ditto	1	12	0
Best Japan Gold Size		0	12	6
Best Black Japan		0	10	6
Oak and Mahogany Stain (water)		0	12	0
Brunswick Black		0	7	6
Berlin Black		0	14	0
Knotting (patent)		1	5	0
French and Brush Polish		0	17	0
Liquid Dryers in Terebine		0	9	0
Grass Black Enamel		0	7	0

Sell's Telegraphic Addresses.

We have lately received the 1929 Edition of Sell's Directory of Registered Telegraphic Addresses, with telephone numbers and classified trades lists. This indispensable Directory contains over 100,000 telegraphic addresses registered at the Post Office, the information being supplied by the Postmaster-General exclusively to this publication. It contains the names of 100,000 leading firms in Gt. Britain and Ireland arranged alphabetically, with full postal address and telephone number, and 130,000 firms classified under 3,500 trade headings, also important firms in U.S.A. and other places abroad. It is a reliable guide, in one volume, to the commercial world. The Press section has been greatly improved this year, and there are several new features embodied in the 1929 issue which will be greatly appreciated, notably the Stock Exchange and American sections.

The new and improved system of reference introduced last year for the first time is continued in this issue, to enable subscribers to find immediately the owner of any telegraphic address. Of particular interest to architects and the building trade is the news that Sell's Building Trades List is now issued as a separate publication, specially for the use of architects and builders. The list contains the names and addresses of the leading firms, and forms a comprehensive guide to the chief producers and suppliers of every kind of requisite used in the construction, maintenance and equipment of buildings. Subscribers may have a copy free upon application. The price of the Directory is 45s., from Business Dictionaries, Ltd., 8-9, Johnson's-court, E.C.4.

THE SCOTTISH BUILDER

NEW BUILDINGS

Arbroath.—Roads.—The Arbroath District Committee of Angus C.C. has approved of the road surveyor's draft estimate for 1929-30, which showed an estimated expenditure on roads amounting to £27,253.

Clyde.—Bridge.—Certain adjustments have been reached in connection with the purchase of property and land by the Corporation of Glasgow for the purpose of the proposed new cross-river bridge at Finnieston.

Clydebank.—Houses.—The Dean of Guild Court has passed plans for the erection, by Sir Robert M'Alpine & Sons, Ltd., of 16 three-apartment houses at Albert-road, Dalmuir. Plans for a temporary power station in Beardmore-street were submitted by the Clyde Valley Electrical Co. and approved.

Edinburgh. — Housing. — The Edinburgh Dean of Guild Court recently continued an application by the Blue Halls (Edinburgh) Co., Ltd., for warrant to erect a picture house at Laurieston-street. The building is to be capable of seating about 2,000. An application by the North British Rubber Company for permission to make addition to the works at Castle Mills was granted. A scheme for 18 houses is proposed by the Edinburgh Welfare Housing Trust, Ltd., and are to be erected in Stevenson-road. The Corporation received warrant to build 16 houses and two shops at Hutchison-avenue and Hutchison-place in continuation of their housing scheme.

Galashiels.—Extension.—The subscribers to Galashiels Cottage Hospital are considering a scheme for the proposed extension of the hospital.

Greenock.—Shops.—The Greenock Dean of Guild Court has granted linings to the Greenock Central Co-operative Society for the erection of shops on a site at the west side of Murdieston-street and opposite Glenview-terrace.

Kirkcaldy.—Houses.—The Kirkcaldy District Committee of Fife C.C. has agreed to provide 30 houses at Thornton, 24 at Lochore, and 20 houses at Lumphinans.

Lanark. — Housing. — The District Committee of the Lower Ward of Lanark have resolved to carry out a scheme for erecting 198 houses.

Linlithgow.—Housing.—The Town Council have decided to proceed with their new housing schemes at the Old Nursery-park and St. John's-avenue sites, where 24 houses of the two-roomed type will be erected.

Motherwell.—Building.—Plans for the extension of the Motherwell silk factory of Messrs. Anderson & Robertson have been passed by the Dean of Guild Court. Plans have also been approved for an addition to the works of Messrs. Stewarts & Lloyds, tube makers, Flemington. The Town Council had plans passed for the erection of 108 two- and three apartment houses of the flatted type, and Messrs. Cowie & Millar, architects, had plans approved for the erection in Coltness-road, Wishaw, of two double cottages consisting of four houses of three apartments each. The Education Authority of the County of Lanark were also granted warrant for additions and minor improvements for Wishaw Public School and for temporary accommodation at Craigneuk R.C. School.

Paisley. — Improvements. — In connection with the Ferguslie improvement scheme of the Corporation, permission has been granted by the Dean of Guild Court for the erection by the Town Council of four three-story tenements of 24 two-apartment houses at Ferguslie.

Wigtownshire.—Roads.—The Machars District Committee of Wigtown C.C. have considered road estimates for £27,955. Two small bridges are to be rebuilt at an estimated cost of £300.

BUILDING TRADE WAGES IN SCOTLAND*

The following are the present rate of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers—Masons'‡ Bricklayers'‡ Plasterers'†
Aberdeen	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Airdrie	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Alexandria	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Arbroath	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/5½	1/1
Ayr	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Bathgate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	1/2 to 1/3
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-
Bo'ness	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Coatbridge	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Dumbarton	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Dumfries	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/6½	1/2
Dundee	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/3 †1/2½
Dunfermline	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7½	‡1/2½ †1/2½
Edinburgh	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/3½ †1/2½
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Galashiels	1/6½	1/7	1/6½	1/7	1/6½	1/6½	1/7	1/2
Glasgow	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Greenock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7	1/2½
Hamilton	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/3
Hawick	1/7	1/7	1/7	1/7–1/7½	1/7	1/7	1/7	1/2½
Helensburgh	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7	1/2½
Inverness	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/- to 1/2
Kilmarnock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Kirkcaldy	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Kirkwall	1/5	1/5	1/4	1/5	1/5	1/4	1/4	1/-
Lanark	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Leith	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/3½† 1/2½
Motherwell	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Perth	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Stirling	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7½	1/2½
Stirlingshire (Eastern District)	1/7½	1/9	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Wishaw	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 702.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	0
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	38	0
Add if in underpinning in short lengths	" "	7	0
Add if in floors 6 in. thick	" "	3	3
Add if in beams	" "	3	9
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	32	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	10	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	1¼

POINTING.

		s.	d.
Neat flat struck or weathered joint	"	0	3

ARCHES.

		s.	d.
Extra only to the price of ordinary brickwork :—			
Fair external in half brick rings	" "	0	10
Axed in stocks	" "	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	6	0

SUNDRIES.

		£	s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard super	4	6
Three-quarter-inch vertical damp course	" "	9	6
Three-quarter-inch on flats in two thicknesses	" "	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	2

MASON.

		s.	d.
York stone templates fixed	per foot cube	13	0
York stone sills fixed	" "	22	0
Bath stone and all labour fixed	" "	10	6
Beer stone and all labour fixed	" "	15	0
Portland stone fixed	" "	20	0

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	0
Do. joists	" "	5	6
Do. roofs, floors and partitions	" "	6	0
Do. trusses	" "	8	6

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-

		s.	d.
Fl.t centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	0	11
Centre for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.

		¾"	1"	1¼"	1½"
Deal edges shot	per sq.	—	44/6	53/-	60/6
Do. tongued and grooved	"	—	49/-	57/6	65/-
Do. matchings	"	45/-	51/-	—	—
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/-	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Dc.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights ; average size	" "	3	9

DOORS.

		1¼"	1¾"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1"	1¼"	1½"
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bea ers	"	1/4	1/6	1/9
Add if cross-tongued	"	2d.	2d.	2d.

STAIRCASES.

	1"	1¼"	1¼"	2"	2½"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1¼ in.	per ft. run	0	9
Mahogany handrail : average, 3 in. × 3 in.	" "	6	0
Add if ramped	" "	12	0
Add if wreathed	" "	24	0

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting into floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	16	3
Plain compound girders	"	19	0
Do. stanchions	"	21	9
In roofwork	"	27	6

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints	ft. run	1/6	1/9	2/-	2/6
Ogee Do. Do.	"	1/9	2/-	2/6	3/3
Rain-water pipes with ears	"	1/9	2/7	—	—
Extra for shoes and bends	each	4/4	5/11	—	—
Do. stopped ends	"	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	"	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	48	6
Do. Do. in flats	"	47	6
Extra labour and solder in coated cesspools	each	6	9
Welf joint	per ft. run	0	6
Soldered seam	" "	1	3
Copper nailing	" "	0	3

		½"	¾"	1"	1½"	2"	4"
Drawn lead waste	per ft. run	1/2	1/9	2/-	3/4	4/-	—
Do. service	"	1/8	2/2	2/7	3/10	—	—
Do. soil	"	—	—	—	—	—	6/9
Bends in lead pipe	each	—	—	—	—	3/3	8/2
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6	—
Read lead joints	"	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws	"	—	—	—	14/7	19/6	—
Bib cocks and joints	"	6/4	9/7	15/4	41/-	—	—
Stop cocks and joints	"	15/4	17/2	25/8	64/-	—	—

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	6
Do. Do. Sirapite	" "	2	9
Do. Do. Keen's	" "	4	0
Add saw lathing	" "	1	7
Add metal lathing	" "	2	6
(Not including hangers or runners, etc., for suspended ceilings.)			
Portland cement screed	" "	2	2
Do. plain face	" "	3	3
Mouldings in plaster	per 1 girth	0	1½
One-and-a-half granolithic pavings	per yard sup.	5	6

GLAZIER.

		s.	d.
21-oz. sheet plain	per foot sup.	0	8½
26-oz. Do.	" "	1	0
Obscured sheet	" "	1	1
⅛-in. rolled plate	" "	0	9
¼ in. rough rolled or cast plate	" "	0	10½
¼-in. wired cast plate	" "	1	4

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	" "	0	7
Plain painting, 1 coat	" "	0	9
Do. 2 coats	" "	1	2
Do. 3 coats	" "	1	9
Do. 4 coats	" "	2	4
Graining	" "	2	3
Varnishing twice	" "	1	9
Sizing	" "	0	3
Flatting	" "	0	7
Enamel	" "	1	1
Wax polishing	per foot sup.	0	6
French polishing	" "	1	2
Preparing for and hanging paper	per piece, 2/- to 4/-		

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted.*
† Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modifications.*

Altrincham.—Forming, draining, kerbing, channelling, cindering, etc., certain streets; and for certain works of sewerage, on the Oldfield Brow Housing estate, for the U.D.C. Mr. H. E. Brown, surveyor:—

*W. Turner (Ardwick), Ltd., Fairfield-street, Manchester.

Amersham.—34 cottages in Chestnut-lane, for the R.D.C. Messrs. Kemp & How, FF.R.I.B.A., architects, 4, Bloomsbury-square, London, W.C.1:—

	Buildings.	*Fencing.*
H. & J. Wright	£20,413	£586
Frank Green	20,340	540
Jesse Mead, Ltd.	20,284	512
Pool & Sons, Ltd.	18,131	732
Rust & Ratcliffe	17,552	609
Chesham Builders, Ltd.	17,307	566
Veness & Son	15,851	478
Wilkins, Hatchell & Co.	15,761	405
*Franklin & Co.	13,431	328

Amersham.—10 pairs of houses at Holmer Green, for the R.D.C. Messrs. Burgess, Holden & Watson, architects, Beaconsfield:—

T. J. Lovell & Son, Beaconsfield	£4,888 0
Brown & Clark, Great Missenden	4,875 0
Cecil James, Holmer Green	4,615 0
Wilkins, Hatchett & Litt, Chesham	4,550 0
W. A. Hazell, High Wycombe	4,486 0
G. H. Buckland, Beaconsfield	4,480 0
Cannon Green & Co., Ltd., Aylesbury	4,432 0
The Universal Housing Co., Rickmansworth	4,192 0
P. Buckle & Son, Haslemere	4,076 0
E. G. Hancock, Amersham	4,003 14
Griffiths (Building Contractors), Wembley	3,982 0
W. S. Try, Uxbridge	3,974 0
Franklin & Co. (Erith), Ltd., Erith	3,777 0
Brown & Co., Chesham	3,553 0

Ampthill.—4 houses at Gravenhurst; 4 at Harlington; 10 at Maulden; 4 at Pulloxhill; 4 at Lower Stondon, Shillington; 4 at Toddington; and 6 at Westoning, for the R.D.C. Mr. Leonard Foster, surveyor, Council Offices, Flitwick:—

Gravenhurst—
*W. H. King, Silsoe £1,248 0
Harlington—
*Seymour Bros. & Tookey, Stotfold 1,266 17
Maulden—
*Seymour Bros. & Tookey, Stotfold 3,094 8
Pulloxhill—
*J. Putman, Steppingley 1,225 0
Lower Stondon, Shillington—
*Seymour Bros. & Tookey, Stotfold 1,224 10
Toddington—
*Matthews & Welch, Leagrave 1,280 0
Westoning—
*Matthews & Welch, Leagrave 1,920 0

Armagh.—Central school:—

*Copeland & Sons, Belfast £20,300

Ayr.—Premises in Main-street. Mr. Kennedy Hunter, architect, 51, Sandgate-street:—

*D. & J. Milligan, Ayr.
Slater—
*A. Ballantyne, Wallacetown.

Badsworth.—Cow house, dairy, etc., at Moorhouse Farm. Messrs. Blenkinsopp & Scatchard, A. & L.R.I.B.A., architects, Midland Bank-chambers, Castleford:—

*W. Sawyer & Sons, Purston.

Bakewell.—Pavilion on the cricket ground for the cricket club:—

*Foundation—*W. J. Eyre, Longstone, near Bakewell.
*Builders—*R. Smith & Sons, Rutland Works, Bakewell.

Bampton.—Church hall. Mr. Harbottle Reed, F.R.I.B.A., architect, Exeter:—

*Heale & Son.

Bath.—Converting the old gas producer house at the Destructor-yard into a garage for the electric vehicles, for the T.C.:—

*Amery & Son £990

Bath.—Erection of the Warminster-road pumping station, for the T.C.:—

*E. Ireland £1,872 17 2

Bath.—Repainting exterior of certain properties, for the T.C.:—

*Stocks & Morris £607 10 5
*Hopes Bros. 33 2 0

Bath.—Repainting the exterior of certain properties, for the T.C.:—

*Mannings & Son, Claverton Down ... £436

Belfast.—Alterations and additions to the Refuge Insurance Co.'s premises, High-street. Mr. W. D. R. Taggart, M.Inst.M. & C.E., architect and surveyor, Scottish Provident Buildings, Belfast:—

Donegall Building Works £3,886 14 11
J. Hogg 3,600 0 0
McDowell & Fitzsimons 3,399 0 0
R. J. McCallen 3,397 0 0
F. B. McKee 3,375 0 0
James Moreland 3,283 0 0
Houston & Graham 3,268 9 10
Isaac Copeland & Sons, Lower Windor-avenue, Belfast 3,050 0 0
(All of Belfast.)

Belfast.—Boundary walls, gates and wrought-iron railings in connection with the widening of Belmont-road from Belmont Church-road to Wandsworth-road, for the C.B. Mr. R. B. Donald, City Surveyor:—

*Grainger Bros., Holywood, Co. Down.

Belfast.—For alterations and additions to the Harding Memorial P.E. school, Gregagh-road, for the C.B. Education Architect, Victoria-street:—

*Houston & Graham, 117, Grosvenor-road £4,606

Belfast.—Installation of electric lighting and heating systems in Riddell Memorial Public Elementary School, Malvern-street, for the C.B. Education Architect, Victoria-street:—

Electric Lighting—
*G. McCartney, 30, Church-street, Belfast £128
Heating Installation—
*Johnson & Co., Ravenhill-road, Belfast 328

Belfast.—Installation of electric lighting at Malone Public elementary school, Balmoral-avenue, for the C.B. Education Architect, Victoria-street:—

*G. McCartney, 30, Church-street, Belfast £143

Belfast.—Public elementary school on a site in North-road, for the C.B. Education Architect, Victoria-street:—

*H & J. Martin, Ltd., Ormeau-road, Belfast £27,601

Belfast.—Window frames, sashes, etc., for the Therapy Building, Municipal Sanatorium, Whiteabbey, for the C.B. Mr. R. B. Donald, City Surveyor:—

*E. Fraser, 58, Alexander-street, Belfast.

Blackburn.—Elementary school at Audley, for the C.B. Mr. H. M. Webb, Borough and Water Engineer:—

*Woof, Cronshaw & Sons, Ltd., Pump-street, Blackburn.

Blackpool.—Steel building at Rigby-road tramways engineering depot, for Tramways, etc., Electricity Committee. Mr. C. Furness, Borough Electrical Engineer and Tramways Manager:—

*Blackburn & Sons, Ltd., Preston.

Bracebridge.—Extensions to the Mental Hospital. Mr. H. S. Hall, architect, Old Market-place, Grimsby:—

Wilkinson & Houghton, Ltd., Grimsby £29,816 0
J. H. Thompson & Sons, Ltd., Grimsby 28,755 0
J. G. White, Nottingham 28,741 2
Mawer Bros., Louth 28,269 0
Thomas Bow, Nottingham 27,774 0
F. W. Horton, Lincoln 27,500 0
Bosworth & Lowe, Nottingham 27,475 0
R. Hustwayte, Nottingham 27,472 0
Thornhill Bros., Lincoln 27,400 0
Gilbert & Hall, Ltd., Nottingham 27,359 0
Bernard Pumfrey, Gainsborough 27,196 14
J. W. Stamp & Co., Nottingham 27,171 0
W. Wright & Sons, Lincoln 26,977 0
*H. Ashton, Barton-on-Humber 25,928 0

Brighton.—For (1) alterations and additions to the Medical Officers' residence at the Poor Law Institution, and (2) hot water service, etc., at the Warren Farm Schools, for the B.G. Mr. E. Wallis Long, architect, 6, Old Steine:—

(1)*E. E. Brown, 30, Langdale-road, Hove £449
(2)*Adams Bros., Broadbridge, Ltd., Trafalgar-street, Brighton £170

Bristol.—For (1) 4 parlour and 56 non-parlour type houses; (2) 4 parlour and 38 non-parlour type on the Fishponds housing estate; (3) 2 parlour and 116 non-parlour type; (4) 4 parlour and 70 non-parlour type; (5) 42 non-parlour type; (6) 38 non-parlour type; (7) 2 parlour and 28 non-parlour type on the Horfield estate, for the Corporation:—

(1)*Bissicks & Fletcher, St. George's Whitehall-road £21,832
(2)*A. W. Norris, Greenbank, Glos. ... 15,084
(3)*E. Walters & Son, Montpelier ... 41,860
(4)*J. Pugsley & Son, Cheltenham-road 26,904
(5)*E. A. W. Poole & Son, Montpelier 15,174
(6)*G. F. Bryant & Sons, Brislington, Glos. 13,512
(7)*E. Howell, Bristol 10,862

Bromford.—8 pairs of non-parlour houses in Cottage-lane and Wharf-lane Minworth, and 2 pairs of non-parlour houses on the Board's Saltley Works, Tyburn-road, Bromford, for the Birmingham Tame and Rea District Drainage Board. Mr. H. C. Whitehead, engineer to the Board, Rookery Park, Erdington, Birmingham:—

	16 *houses Minworth.*	4 *houses Saltley.*
Breeze & Sons	£6,195 4	£1,700 6
G. F. Ellis	5,840 0	1,660 0
S. Heatley	6,496 0	1,750 11
James & Son	6,470 0	1,745 0
J. Larkman	5,961 11	1,644 12
Lawson & Sons	6,699 14	1,546 13
J. & W. Malley	6,285 0	1,695 0
F. C. Price, Ltd.	6,520 0	1,843 0
Rix & Son	*5,327 1	1,559 2
Rooms & Aldridge	5,440 0	*1,500 0
L. C. Smith	—	1,840 0
G. Smith	5,454 8	1,516 15
Stevens & Morland	7,200 0	900 0
		(*Pair only*)
G. Stubbings	6,306 0	1,630 0
Thompson & Co.	6,440 0	1,823 0
B. S. White	5,594 5	1,604 8

Caerphilly.—For making and supplying laboratory fittings and furniture for the Caerphilly Secondary school, for the Glamorgan E.C. Mr. D. Pugh Jones, F.R.I.B.A., County Architect, County Hall, Cardiff:—

*W. & J. George, Ltd., Birmingham £1,227 10

Cardiff.—Reconstruction of existing schools of St. Peter's, St. Peter's-street, Roath, for Rev. Michael Fennell. Messrs. F. R. Bates & Son, A.R.I.B.A., architects, Tredegar-chambers, 78, Bridge-street, Newport (Mon.):—

*Knox & Wells, Ltd., Cardiff.

Carlisle.—Construction of two ejector chambers and air compressing chamber, for the City Council:—

*J. Laing & Son, Ltd. £1,936 5 8

Chadderton.—Alterations and extensions to the sewage and sewerage disposal works, for the U.D.C. Messrs. James Diggle & Son, consulting engineers, Hind Hill-street, Heywood:—

*James Berry, Ltd., Heywood £13,000

Chatteris.—20 non-parlour type houses in New-road, for the U.D.C. Mr. Solden Hipwell, architect, 19, New-road:—

	Per pair.
Wm. Evans, Pentraeth	£766
F. Tucker & Sons, Ely	745
J. T. Jupp, Wisbech	730
Eggett & Sons, March	698
Pettitt & Sons, Ramsey	685
T. W. Dack, Doddington	669
Sir Wm. Prescott & Sons, London	657
B. Lofts, Littleport	650
Wm. Canham, Somersham	650
†Bristow & Melton, Chatteris	623

Chelmsford.—Alterations and additions to the market buildings, for the Corporation:—

*D. Marvien, Galleywood £1,147

Cheltenham.—Nurses home in the grounds of the Poor Law Institution, Swindon-road, for the B.G. Messrs. L. W. Barnard & Partners, architects and surveyors, Promenade:—

*W. T. Nicholls, Ltd., St. Paul's-road, Gloucester £6,559

Chipping Sodbury.—Houses for the R.D.C. Mr. W. H. Williams, architect:—

Yate site—
*H. E. James, Heathfield Estate, Yate £8,972 17 3
Wick site—
*Jos. Gunning, Warmley, near Bristol 3,623 17 0
Old Sodbury site—
*H. Williams, Warmley, near Bristol 1,291 3 9

Cleckheaton.—Public library at Whitcliffe-road, for Mr. J. S. Mowatt. Messrs. R. Castle & Son, architects, Midland Bank-chambers:—

*J. Horkin & Son.

Cleckheaton.—Public library in the Whitcliffe, for Spenborough U.D.C. Messrs. R. Castle & Son, L.R.I.B.A., architects, Midland Bank-chambers, Cleckheaton:—

*J. Horkin & Sons, Liversedge.
*Carpenter's and Joiner's—*Beaumont & Smith, Gomersal.
*Plumber's—*Crowther Wood, Hightown.
*Slater's—*J. H. Pycock, Heckmondwike.
*Painter's—*J. Burnhill, Cleckheaton.
*Electrician's—*F. W. Birkett & Sons, Ltd., Cleckheaton.
*Wood block floor—*Hollis Bros., Ltd., Hull.
*Heating—*Craig & Mills, Ltd., Manchester.
*Steel windows—*W. James & Co., London.

Cork.—New Bishop's Palace, in Bishop's Field, Farranferris, for the Rev. D. Cohalan, D.D., Lord Bishop of Cork. Mr. J. R. Boyd Barrett, A.R.I.B.A., chartered architect, 61, South-hall, Cork.

*Murphy Bros., North Abbey-street, Cork.

Cornwall.—Cleaning and repainting station buildings, etc., at Penryn, Falmouth and Perranporth, for the G.W.R.:—

*A. Bagnall & Sons, Ltd., 7, Market-street, Shipley, Yorks.

Debenham.—Enlargement of the Sir Robert Hitcham Schools. Mr. R. G. Fordham, architect and surveyor, Victory-road, Ipswich:—

G. A. Kenney & Sons, Ipswich	£3,333 0 0
A. J. Gibbons, Ipswich	3,185 0 0
H. Durrant, Ipswich	3,076 10 0
W. B. Kingsbury, Colchester	2,855 0 0
W. & P. Elliott, Woodbridge	2,841 7 6
*C. E. & S. C. Sparrow, Debenham, Stowmarket	2,725 0 0
L. Goldsmith & Co., Woodbridge	1,690 0 0

Dewsbury.—Extensions to the central offices and depot, for the Yorkshire (W.D.) Tramways, Ltd. Messrs. Stead & Walshaw, architects, Heckmondwike:—

*Robinson & Crowther.

Dewsbury.—Sub-station in the grounds adjoining the Clinic, Halifax-road, for the C.B.:—

*A. C. Smith, Earlsheaton £319 2 1

Doncaster.—Shelter in Elmfield-park, for the C.B. Mr. R. E. Ford, Estates and Race Surveyor, 3, Priory-place:—

*Gill & Ross, Crimpsall Works, Saw Mill-yard, Marsh-gate, Doncaster £225 6 6

Drogheda.—Coal depot extension, for the Drogheda Harbour Board:—

*J. Gogarty, Drogheda £266

Durham.—New hall, at Thornley. Messrs. Hays & Gray, F. & A.R.I.B.A., architects, Front-street, Wingate:—

*W. Pearson & Sons, West Hartlepool.

Edgware.—Alterations and additions to the "Bald Faced Stag" public-house. Mr. Nowell Parr, F.R.I.B.A., architect, 42, Cranley-gardens, South Kensington, S.W.7. Messrs. Robinson & Roods, quantity surveyors, 37, Bedford-row, W.C.1:—

Hall, Beddall & Co., Ltd.	£6,035
W. J. Dickens	5,950
Greeson & Son	5,948
Dean & Co.	5,933
J. Fassnidge	5,927
Bovis (1928), Ltd.	5,887
F. & H. F. Higgs, Ltd.	5,858
Holliday & Greenwood, Ltd.	5,618
J. Dorey & Co., Ltd.	5,580

Faversham.—52 houses, for the R.D.C.:—

*S. Tree, Ramsgate £13,642

Hatfield.—New public offices, for the R.D.C.:—

F. Gilbert	£7,290
—. Clayton	6,725
Ginn & Son	6,699
Redhouse & Son	6,437
Shadbolt & Nash	6,422
W. Porter	6,360
F. J. Bailey & Co., Ashwell	6,250
J. Dennis	6,232
Turner & Payne	6,131
Lacey & Son	6,120
Miskin & Son	6,003
W. J. Richardson & Son	5,952
H. E. Winskell	5,937
Pettengell & Co.	5,763
M. & F. O. Foster, Ltd.	5,436
*W. F. Bailey	5,298

Hayes.—Caretaker's lodge and all appurtenant work thereto at Barra Hall Park, and mortuary, coroner's room, motor ambulance station, garages and workshop, etc., at the Town Hall, for the U.D.C. Mr. G. H. Connor, engineer and surveyor:—

R. J. Mackenzie & Son, Ltd., Hayes	£4,085 5 9
J. Matson, Hayes	2,994 0 0
W. S. Try, Uxbridge	2,982 0 0
C. J. A. Mead, Hayes	2,437 16 0
*H. A. Parr, Wood End, Hayes	2,353 16 0
Engineer and Surveyor's estimate	2,625 0 0

Hornchurch.—Church hall in North-street, for the Parochial Church Council:—

*Coryn & Son, Haynes Park, Hornchurch £2,209

Hornsey.—Public convenience in Priory-road, for the T.C. Mr. W. H. Adams, Borough Engineer and Surveyor:—

*Arundel (Contractors), Ltd., Stratford £1,184 5 8

Hove.—Motor coach and carriage works and office block, for Messrs. Thos. Harrington, Ltd., of Brighton. Mr. Stavers H. Tiltman, L.R.I.B.A., architect, 42, Middle-street, Brighton:—

Saunders, Brighton	£37,448
J. Barnes & Sons, Brighton	35,875
J. Parsons & Sons, Ltd., Hove	35,856
Field & Cox, Ltd., Brighton	35,595
Rice & Son, Ltd., Brighton	34,445
*Bodle, Ltd., Brighton	33,683

Hove.—Office and store, with flat above, in Isabel-crescent, for the Corporation. Mr. T. L. Hamble, Borough Surveyor:—

*T. J. Braybon & Co., 39, St. James-street, Brighton £1,018

Ipswich.—Alterations to Ivry House, Ivry-street, for the Board of Management of the East Suffolk and Ipswich Hospital. Messrs. Cautley & Barefoot, AA.R.I.B.A., architects, The Thorofare:—

*Fisk & Co., Ranelagh-road, Ipswich £1,084 10

Ipswich.—100 houses, for the T.C.—

‡H. E. Pitt, Ltd., Sunderland £43,011 5

Keighley.—Verandahs, at block F, of the Fever Hospital, at Morton Banks, for the Keighley, Bingley and Shipley Joint Hospital Board. Mr. Frank Atkinson, L.R.I.B.A., architect, Old Bank Chambers, Bingley:—

Masons and Concretors—*J. Brown & Son, Crossflats, near Bingley.
Patent Glaziers, etc.—*W. H. Heywood & Co., Ltd., Huddersfield.

Kilrush.—8 houses at Kilrush, Co. Clare, for the Irish Sailors' and Soldiers' Land Trust. Mr. W. J. Brown, F.R.I.B.A., architect:—

*Simon Cusack, Moore-street, Kilrush £4,523 13 8

Kingston.—Repairs, painting and building works at Kingston and District Hospital and Central Relief Institution, and shed at rear of the Union Offices, for the B.G. Mr. F. G. Hughes, The Estate Office, Hampton, Middlesex:—

*Messrs. David Pierson & Co., Ltd., 1, Salcott-road, Wandsworth Common, S.W.

Leeds.—Alterations and additions at the Guildford Hotel. Messrs. Kitson, Parish & Ledgard, architects:—

*B. Coates & Son.

Leeds.—Reconstruction of shop premises in Commercial-street, for Messrs. Styles & Mantles, Ltd. Mr. N. K. Glass, architect:—

*J. Bennett, Ltd.

Leyland.—Bridge over Lostock and road improvements works at Hipping Stones, Longmeanygate, for the U.D.C. Mr. M. H. Wilkinson, surveyor:—

*L. Fairclough, Ltd., Adlington.

Limerick.—Reservoir and pumping station in connection with the combined Newcastle West-Rathkeale water supply, for the Limerick Co. Health Board:—

M'Nally & Co., Dublin	£8,132
Thompson, Carlow	7,988
M'Caffrey & O'Carroll	7,691
*P. Dillon	6,111

Linslade.—Extension of the council offices, for the U.D.C. Mr. H. A. Rolls, L.R.I.B.A., architect, 15, Bridge-street, Leighton Buzzard:—

W. Jones, Luton	£925
E. Pryer, Luton	875
G. Alcock, Cheddington	770
*W. G. Willis & Son, Leighton Buzzard	718

Littleborough.—48 houses on the Turf House estate, Shore-road, for the U.D.C. Mr. A. Travis, architect, Union Bank-chambers, King-street, Rochdale:—

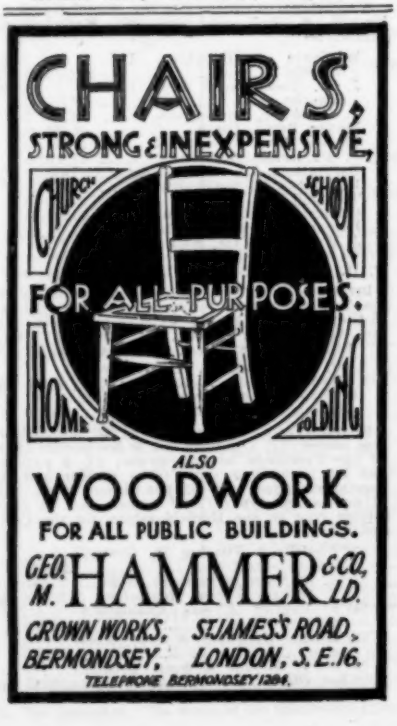
James Rangeley, Rochdale.
James Mann, Ltd., Newhey.
Wm. England & Son, Littleborough.
Dryland & Preston, Littleborough.
C. R. Bradley, Bacup.
Leach & Unsworth, Newton Heath
T. Wilkinson & Son, Rochdale.
*R. & T. Howarth, Rochdale.
(Subject to acceptance by the M.H.)

Littlehampton.—Two shelters on The Parade, for the U.D.C. Surveyor:—

*P. Cooper, Littlehampton £477

Liverpool.—Bowls pavilion and conveniences at the Wavertree Playground, for the T.C. Land Steward and Surveyor:—

*Rimmer Bros., Dalton-street, Liverpool.



Liverpool.—Electric sub-station in Roscoe-lane, for the T.C.:—

*C. & G. L. Deseer, Ltd., 118, Everton-road, Liverpool £969

Liverpool.—Fitting up the branch library and reading room at Dingle House, South Hill-road, ready for occupation, for the T.C. Acting Director of Housing:—

*Collins & Sons, 7, Vauxhall-road, Liverpool £771

Liverpool.—Fitting up the Infant Welfare Centre ready for occupation at Dingle House, South Hill-road, for the T.C. Acting Director of Housing:—

*Collins & Sons, Ltd., of 7, Vauxhall-road, Liverpool £967

Liverpool.—Public conveniences for females in Great George-place, for the T.C. City Engineer:—

*J. Hall & Co., Comus-street, Liverpool £1,291 2 0

Liverpool.—Public convenience in King-street, Garston, for the T.C. City Engineer:—

*B. Wearing & Sons, West Derby, Liverpool £896

Liverpool.—Supply and delivery of 4,224 yards of wrought iron railings, including gates required for the fencing of land on the line of the East Lancashire-road, for the T.C. City Engineer:—

*T. Blackburn & Sons, Ltd., Preston £1,481 18 2

Llandovery.—20 houses, for the T.C.:—

—. Broadford, Newport	£7,760
—. Morgan, Neath	7,750
Thomas Jenkins, Blaengarw	7,473
*D. J. Thomas, Ammanford	7,420
E. Davies Jones, Cardiff	7,210
W. Humphreys, Glyn-Neath	7,172

London.—Banking premises in Edgware-road, W., for the Westminster Bank, Ltd. Messrs. Hall-Jones & Dewhirst, FF.R.I.B.A., architects, Parliament-mansions, Victoria-street, S.W.1:—

Building—*Harry Neal, Ltd., Northwood, Middlesex.
Steelwork—*Edward Wood & Co., Ltd., Manchester.
Asphalt—*Val de Travers Asphalte Co., Ltd., London Wall, E.C.
Portland stone—*Walter Bryant, Bristol.
Lift—*Smith, Major & Stevens, Ltd., Northampton.

London.—Block of flats and shops in Lyttleton-avenue, Finchley, N.W., for the Second Hampstead Tenants, Ltd. Mr. Cecil G. Butler, A.R.I.B.A., 33a, The Parade, Golders Green, N.W.:—

Building—*Garsubil, Ltd, Temple Fortune-arcade, N.W.11.
Steelwork—*Homan & Rodgers, Ltd., Villiers-street, W.C.2.
Masonry—*F. J. Hide & Co., Trussley-road, W.6.

London.—Cleaning and painting works and repairs, at the Fountain Mental Hospital, for the M.A.B.:—

R. Robinson, Bradford	£498 17
Sykes & Son, Ltd.	496 4
H. Lawrence & Sons, Worksop	482 0
E. Proctor & Sons	429 0
F. Firth, Shipley	420 0
G. Jones & Son, Liverpool	418 0
Mond Staffordshire Refining Co., Ltd.	399 13
J. S. Fenn, Ltd.	383 0
J. & R. Thompson (London), Ltd.	380 0
Lilly & Sons	373 0
Thomas Carrington & Co., Ltd.	365 4
*A. H. Inns, Ltd., Fox-court, Holborn, E.C.	324 0

(Remainder of London.)

London.—Cleaning and painting works, at the S. Luke's Hospital, for the M.A.B.:—

Moore & Sons, Gt. Yarmouth	£759 0
E. Proctor & Sons, Plumstead	636 0
R. Robinson, Bradford	597 10
H. Lawrence & Sons, Worksop	563 10
W. J. Croft, Lowestoft	557 0
D. Leighton & Son, Ltd., S. Lowestoft	520 0
F. Firth, Shipley	514 0
*G. Jones & Son, 91, Everton-road, Liverpool	399 0

London.—Cleaning and painting works, at the Western Hospital, for the M.A.B.:—

R. Blackmore	£1,006 13
R. Robinson, Bradford	948 10
Lilly & Sons	927 0
H. Lawrence & Sons, Worksop	912 10
Savage & Co.	899 0
E. Proctor & Sons	830 0
Sykes & Son, Ltd.	731 2
A. H. Inns, Ltd.	723 0
J. & R. Thompson (London), Ltd.	700 0
L. Kazak & Co.	689 0
J. S. Fenn, Ltd.	673 15
G. Jones & Son, Liverpool	609 0
Lister, Mawby (Builders), Ltd.	575 0
Mond Staffordshire Refining Co., Ltd.	556 11
*D. C. Bowyer, Heron Works, Heron Hill, Belvedere	497 9

(Remainder of London.)

Kinsale.—Repairs to the old workhouse buildings, for the South Cork County Board of Health:—

*D. Desmond, Bandon £1,568

London.—Cleaning, painting and repairs, at the South-Western Ambulance Station, for M.A.B.:—

A. Logan	£240 0
H. Lawrence & Sons, Worksop	226 10
R. Robinson, Bradford	190 0
Savage & Co.	168 0
G. Jones & Son, Liverpool	166 0
Sykes & Son, Ltd.	151 13
L. Kazak & Co.	150 0
Mond Staffordshire Refining Co., Ltd.	134 5
E. Proctor & Sons	129 0
Lilly & Sons	127 0
A. H. Inns, Ltd.	123 0
D. C. Bowyer	120 10
*Thomas Carrington & Co., Ltd., Kingshall Works, Beckenham (Remainder of London.)	100 5

London.—Extension of factory premises at Newton Works, Macklin-street, Holborn, for Messrs. J. T. Lock & Co. Mr. L. W. Myers, architect, 13, Gray's Inn-square, W.C.1:—

*S. G. Goulding, Hornsey.

London.—Formation of sister tutor's office and lecture room, at the South Western Hospital, for the M.A.B.:—

A. Logan	£999 0
H. Bragg & Sons, Ltd.	984 0
E. Proctor & Sons	940 0
A. H. Inns, Ltd.	900 0
E. Mansell	847 0
Savage & Co.	784 0
*Carrington, Thomas & Co., Ltd., Kingshall Works, Beckenham (All of London.)	685 18

London.—Improvements and additions to the Church of Our Immaculate Lady of Victories, Clapham Park-road, S.W.4. Mr. G. B. Cox, F.R.I.B.A., of Messrs. Harrison & Cox, architects, 109, Colmore-row, Birmingham:—

*Holloway Bros., Ltd., London.

London.—Rebuilding of the showroom and office premises at 112-116, New Oxford-street, W.1, for Messrs. Alfred Imhoff, Ltd. Mr. Robert Atkinson, F.R.I.B.A., architect, 36, Bedford-square, W.C.1. Messrs. Hogg & Keay, quantity surveyors, 5, Lancaster-place, W.C.2:—

F. & P. H. Higgs, Ltd.	£25,852
Ford & Walton, Ltd.	25,647
Holloway Bros. (London), Ltd.	24,730
F. G. Minter, Ltd.	24,589
Knox & Dyke, Ltd.	24,313
Patman & Fotheringham, Ltd.	24,241
Bovis (1928), Ltd.	23,757
Mullen & Lumsden, Ltd.	23,848
Humphreys, Ltd.	23,315
Lansdowne Building Co., Lansdown Works, Brixton, S.W.	22,643

London.—Rebuilding of 10, Smith-square, S.W.1, for the British American Tobacco Co., Ltd., Westminster House, Millbank, S.W.1. Messrs. Gordon & Gordon, architects, Finsbury House, Blomfield-street, E.C.2. Mr. Sydney Gordon, quantity surveyor, Finsbury House, Blomfield-street, E.C.2:—

Holland & Hannen & Cubitts, Ltd.	£90,900
Trollope & Colls, Ltd.	88,960
Bovis (1928), Ltd.	88,826
*William Downs, Ltd., 12, Hampton-street, S.E.17	84,169

London.—Steel girders for the G.W.R. Mr. F. R. E. Davis, secretary, Paddington Station, W.2.—

*Horsehay Co., Ltd., Horsehay, Wellington. Shropshire.

London.—Waiting-rooms and platform covering at Westbourne Park station, for the G.W.R. Mr. P. E. Culverhouse, F.R.I.B.A., architect, Paddington-station, W.2:—

*W. Walkerdine, Ltd., Walmer-road, Notting Hill.

London.—Shelter at St. Andrew's Hospital, Devon's-road, Bow, E.3, for the Poplar Board of Guardians. Mr. Harley Heckford, M.I.C.E., Borough Surveyor, Council Offices, High-street, E.14:—

H. Bridgeman, Walthamstow	£1,038 10 0
R. J. Truscott, Stratford	635 0 0
J. & R. Rooff, Barking	615 0 0
*Reader Bros., Hackney	549 4 7

London.—Open-air wards at the Woolwich Union. Messrs. Whincop & Channer, architects:—

J. Darek, Ltd.	£975
R. Mansell	917
Proctor & Son	915
Edwards Construction Co.	878
R. Woolaston & Co.	845
Thomas & Edge	832
G. Coe	815
P. Jones	806
W. Pavey & Sons	789
W. Harris, Ltd.	786
W. Simms, Ltd.	775
Aurndell, Ltd.	755
W. Mills & Sons, Ltd. (All of London.)	746

Londonderry.—Cemetery wall, for the Corporation:—

*J. Colhoun £2,550

Long Eaton.—Church of St. Francis of Assisi, for the Rev. A. J. Bird, The Presbytery, Tamworth-road. Messrs. Foden, Hemm & Williams, architects, 199, Deansgate, Manchester:—

*Atkin Bros. (Shepshed), Ltd., Shepshed.

Ludlow.—40 houses in Sandpits-road, for the T.C. Capt. W. G. Lane, Borough Surveyor:—

Davies & Prosser, Bournemouth	£15,794
J. Bowdler, Ludlow	13,395
W. Higley, Shrewsbury	13,240
J. C. Vaughan, Oswestry	12,814
J. Morgan, Neath	12,700
*W. E. Hughes, Ltd., Birkenhead	12,120
Surveyor's estimate	12,500

Manchester.—Parochial hall in Plant Hill-road, off Victoria-avenue, Blackley, for the Rev. Daniels, of St. Clares', Blackley. Mr. F. Thomas, architect, Moston, Manchester:—

*Moston Brick & Building Co., Ltd., Manchester.

Mayo.—Erection of walls round burial grounds, for the Co. Mayo Board of Health:—

At Bofeenaun—	
*P. Reilly	£145
At Kilcommon—	
*J. O'Donnell	117
At Glencastle—	
*J. Kerrigan	364

Mitcham.—Supply and installation of two steam chambers, hot closet and carving table, at the Holborn schools, London-road, Mitcham, Surrey, for the Holborn Guardians. Chas. J. Cross, Clerk, Administrative Offices, 53, Clerkenwell-road, E.C.1:—

F. Stevens & Marland, London	£521 15 6
Wm. Bailey & Sons, Ltd., London	210 10 0
Moorwoods, Ltd., Sheffied	206 1 0
The Brightside Foundry & Engineering Co., Ltd.	193 16 0
*H. & H. Davis & Co., 16, Ormand-yard, W.C.2	250 10 0

Monaghan.—Piggery, at the County Home, for the County Board of Health:—

*O. Crean, Kilnavady £130

Monkseaton.—New infants' Council school at Monkseaton Village, to accommodate 150 scholars, for the Northumberland E.C.:—

*Adam R. Robertson, Blyth, Northumberland £3,201 10

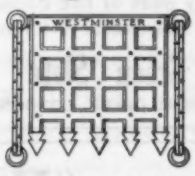
Northampton.—Construction of a ferro-concrete river wall and necessary dredging to widen the bathing place at Kingsthorpe bathing place, for the C.B.:—

*K. Holst & Co., London £865

Paignton.—13 houses in York-rd., for the U.D.C. Mr. G. W. Colborne, architect, Picture House-chambers, Paignton:—

Knapman, Bros.	£6,481 0
Willicott & Barnes	6,530 0
Willcocks & Barnes	6,015 13
Tancock & Collard	5,405 0
Melhuish & Beary	5,849 0
Wallis, Underhay & Co.	5,876 12
Peeke Bros.	5,685 0
*Unity Builders (Paignton), Ltd. (All of Paignton.)	5,195 2

"2 Firms working together"



MORRIS-SINGER COMPANY
ARCHITECTURAL METALWORKERS
AND
MORRIS & COMPNY
WESTMINSTER LTD
METAL WINDOWS
LANTERN LIGHTS
LEADED GLASS
MORRIS HOUSE
ROCHESTER ROW S.W.1.

Penryn.—20 houses at Glenview, for the T.C.:—

E. Thomas (Falmouth)	£10,713 0
J. H. Lobb	9,700 0
T. A. Porter	9,485 0
Richard Bros.	9,322 0
*Percy Williams	8,660 0
F. Mitchell, Ltd.	8,658 10

Pontefract.—Extensions to the I.L.P. Club, Headlands. Messrs. Blenkinsopp & Scatchard, A. & L.R.I.B.A., architects, Midland Bank-chambers, Castleford—

*Barber & Heseltine, Pontefract.

Poole.—For (1) 24 houses at Hamworthy, and (2) 28 houses on the Haskel estate, for the Corporation:—

(1)*J. Hallett	£7,119
(2)*G. Chapman	8,362

Reading.—Erection of Somerset House, Blagrave-street and Friar-street, for Mr. H. G. Blagrave. Mr. Frederick G. Sainsbury, L.R.I.B.A., architect and surveyor, 154, Friar street:—

Exclusive of specialists' work—

A. A. Moynihan, Theale, Berks	£ 24,566
Walden & Son, Henley-on-Thames	22,330
Holloway Brothers, London	22,058
Allen Fairhead & Sons, Enfield	22,000
F. Newberry & Son, Reading	21,700
Geo. S. Lewis & Bro., Reading	21,690
J. Smallbone & Sons, Streatley, Berks	21,566
Sabey & Son, London	21,479
Boshers (Cholsey), Ltd., Cholsey	20,328
McCarthy E. Fitt, Reading	21,196
Collier & Catley, Ltd., Reading	21,148
*Wheeler Bros. (of Reading), Ltd., Reading	19,846

Rotherham.—Building to accommodate gas-making plant, for the Corporation:—

*R. & J. Dempster, Ltd., Newton Heath, Manchester £1,312

Rotherham.—Works in connection with the River and Canal pumping scheme, for the Corporation. Mr. Vincent Turner, Borough Engineer:—

*Edcaster, Ltd., Doncaster £7,399

Rugby.—12 non-parlour type cottages at Chapel-street, Long Lawford, for the R.D.C. Mr. J. E. Weeks, surveyor, Temple-street:—

*Snodin & Sons, Ltd., 90, Osborne-road, Leicester £3,899

St. Albans.—For (*a*) 18 houses at London Colney; and (*b*) 8 houses at Leverstock Green, for the R.D.C.:—

(*a*)—
*A. Ivory & Sons £7,146
(*b*)—
*Bennett Bros. 3,512

Scarborough.—Motor omnibus station at Vernon-road, for the United Automobile Services, Ltd. Mr. F. A. Tugwell, A.R.I.B.A., architect, 102, Westborough:—

Builders' work—*Stephen Easton, Ltd., Newcastle-on-Tyne.
Steelwork—Tees Side Bridge & Engineering Co., Ltd., Middlesbrough.

Sheffield.—Erecting hoarding and pulling down buildings in Abney-street, Portobello, for the University. Messrs. Gibbs & Gibbs, architects, 15, St. James's-row. Quantities by the architects:—

H. E. Fern, Sheffield	£486 10
D. O'Neill & Son, Sheffield	375 0
*Joseph Smith, 30, Denby-street, Sheffield	220 0

Sheffield.—Heating installation at the Lodge Moor Hospital extension, for the T.C. Mr. W. Geo. Davies, F.R.I.B.A., City Architect:—

*G. N. Haden & Sons, Ltd., Manchester £1,560

Sheffield.—Improvements to St. Phillip's Church, Upper Thorpe, for the Parochial Church Council. Mr. J. H. Stevens, architect, Temple-chambers, 13, Figtree-lane:—

*C. H. Gillam & Sons, Sheffield £2,000

Sheffield.—153 non-parlour type houses on the Wisewood estate, for the T.C. Mr. W. Geo. Davies, F.R.I.B.A., City Architect:—

*S. Higton & Sons, Sheffield (77)	£28,883 15 8
*O. W. Alflat, Sheffield (44)	15,360 0 0
*J. Laver & Sons, Ltd., Sheffield (32)	11,394 0 0

Sheffield.—Works in connection with extensions to the Electricity Generating Station, for the Corporation:—

Cooling towers and tanks—Davenport Engineering Co., Ltd. £19,194
Buildings and civil engineering works—Mitchell Conveyor Co., Ltd. £172,893

Smethwick.—Extension of the Holly Lodge High School for Girls, for the E.C. Mr. G. Randle, architect, Education Offices, 215, High-street:—

A. H. Guest, Ltd., Stourbridge	£3,539
G. Webb & Sons, Ltd., Birmingham	3,449
G. & H. Marshall, Smethwick	3,497
E. Breeze & Sons, Walsall	3,447
W. B. & F. T. Archer, Birmingham	3,210
J. & W. J. Malley, Birmingham	3,197
Stanton G. Marsh, Birmingham	3,243
Wm. Jackson (Langley Green), Ltd. Birmingham	3,172
Bridgewater Bros., Cradley Heath	3,049
*J. T. Harris, Ltd., Oakwood-road, Sparkhill, Birmingham	2,966

Strathdon.—Farm buildings at Lost, Candacraig estate. Mr. G. Bennett Mitchell, architect, 1, West Craibstone-street, Bon-Accord-square, Aberdeen:—

Mason work—*J. Ritchie, Rhynie.
Carpenter, painter and glazier works—*P. G. Raitt, Aberdeen.
Slater, roof plumber and cement works—*J. Durnin, Aberdeen.

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Stalybridge.—School extensions at West Hill Central (Boys') School, for the E.C. Mr. P. Howard, A.R.I.B.A., architect, 88, Mosley-street, Manchester:—

*Shuttleworth Bros., Corporation-street, Stalybridge.

Stockport.—For bowl-houses and shelters at (a) St. Thomas's and (b) North Reddish Recreation Ground, for the T.C. Mr. H. Hammer, Borough Surveyor:—

(a)—
*J. Foulkes & Son, Stockport ... £1,263 17 6
(b)—
*F. W. L. Castle, Ltd., Greek-street, Stockport ... 1,513 0 0

Thurnscoe.—Manse, for the Wesleyan Methodist Church, for the Rev. F. Norman Charley. Shirley House. Mr. W. T. Turner, architect, Westville-road, Barnsley:—

*A. Taylor & Son, Wombwell, near Barnsley.

Uppingham.—Eight non-parlour type cottages, at Seaton (4), and Wing (4), for the R.D.C. Mr. G. Dolphin, housing surveyor, North-street:—

A. Dalby, Uppingham	£3,888 19 0
T. A. Dorman, Uppingham	3,857 10 6
O. P. Drever, Ltd., Kettering	3,607 8 3
Brown & Co., Grantham	3,468 3 9
A. J. Stimson & Son, Somerby	3,389 9 0
E. Ireson, Stamford	3,331 0 9
*W. Freeman, Oundle	3,077 16 7
Seaton only—	
R. Clarke, Lyddington	1,653 0 0

Walthamstow.—Laboratory and library at the Girls' Secondary School, for the Essex C.C. Mr. Jno. Stuart, F.R.I.B.A., architect, Springfield Old-court, Chelmsford:—

*J. and J. Dean, Knotts Green-road, Leyton, E. ... £2,055

Whitenaven.—Conversion of the old infirmary into a central school, for the E.C.:—

*T. Armstrong & Co., Cockermouth ... £6,108

Winchester.—Repairs to 3, The Square, for the T.C.:—

‡W. H. Paul & Son ... £115

Wrexham.—36 houses on the Luntroyd estate, for the T.C.:—

*J. Gerrard & Sons, Ltd., Swinton, Manchester ... £10,860

York.—20 parlour houses in Tang Hall-lane, for the City Council. Mr. F. W. Spurr, City Engineer:—

*J. Sawdon, Bridlington ... £7,600

York.—Structural alterations to the Technical Institute, Clifford-street, for the Corporation. Mr. F. W. Spurr, City Engineer:—

*F. Shepherd & Sons, Ltd., Bridge-lane, York ... £1,503

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